



**HS960, AG-200E**

Wireless Hotspot and Printer

## Safety and Precaution

### Installation

- Use only the type of power source indicated on the marking labels.
- Use only power adapter supplied with the product.
- Do not overload wall outlet or extension cords as this may increase the risk of electric shock or fire. If the power cord is frayed, replace it with a new one.
- Proper ventilation is necessary to prevent the product overheating. Do not block or cover the slots and openings on the device, which are intended for ventilation and proper operation. It is recommended to mount the product with a stack.
- Do not place the product near any source of heat or expose it to direct sunlight.
- Do not expose the product to moisture. Never spill any liquid on the product.
- Do not attempt to connect with any computer accessory or electronic product without instructions from qualified service personnel. This may result in risk of electronic shock or fire.
- Do not place this product on unstable stand or table.

### When in Use

- Power off and unplug this product from the wall outlet when it is not in use or before cleaning. Pay attention to the temperature of the power adapter. The temperature might be high.
- After powering off the product, power on the product at least 15 seconds later.
- Do not block the ventilating openings of this product.
- When the product is expected to be not in use for a period of time, unplug the power cord of the product to prevent it from the damage of storm or sudden increases in rating.

### Service

Do not attempt to disassemble or open covers of this unit by yourself. Nor should you attempt to service the product yourself, which may void the user's authority to operate it. Contact qualified service personnel under the following conditions:

- If the power cord or plug is damaged or frayed.
- If liquid has been spilled into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally when the operating instructions are followed.
- If the product has been dropped or the cabinet has been damaged.
- If the product exhibits a distinct change in performance.

### Caution

- Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.

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# 1. INTRODUCTION

The NetComm HS960 is a compact intelligent gateway integrated with a four-port port-based VLAN switch. It provides Plug' Play Internet access, advanced security and network management.

The HS960 is designed for service providers, system integrators or hotspot venue operators to offer integrated solutions for rapid deployment, which can start a hotspot service quickly and easily offering enhanced service performance.

The HS960 is an ideal solution for hotel lobbies, coffee bars, airport lounges, conference facilities and other sites that commonly host business travelers, and offers instant high-speed Internet connections. With its IP Plug and Play technology the HS960 accepts any client configuration login. When the client opens a browser window, the HS960 immediately recognises a new end-user and redirects their browser to customizable log in web page. There is no need for end users to change any of their default network (Static IP), e-mail (SMTP Server behind firewall), or browser settings (HTTP Proxy) or load any special software to access the hotspot service. The HS960 is completely Plug' n Play with any browser.

This guide covers areas specific to administrator of the Wireless Gateway and will help in you in customising the device to suit your needs.

## **Login page:**

The HS960 Wireless Gateway allows you to change the look and feel of the login page that a subscriber will see when logging onto the Internet. You can decide what the welcome message is, if you want a logo on the page, or if you would like the web page split into two frames with the login fields in the bottom frame and a website of your choice in the top frame. You can even code your own login page or redirect the subscriber to a different website address.

## **Receipt:**

Customise what is printed on the receipt issued to subscribers.

## **Billing:**

You can decide how much to charge people to use the service, and customise a billing profile for each button on the printer that comes with the HS960 Wireless Gateway. You can implement discounts based on button sequences on the printer. Decide how you would like your customers to pay for the service - before logging in, or once they have finished using the Internet.

## **Accounting:**

Decide whether you would like to use the HS960 printer or a printer on your network to print account details.

## **Pass Through:**

Allow certain machines to access the internet without having to enter a username and password. This is ideal for VIP members. You can also allow subscribers to access certain websites without having to enter a username and password by listing the website addresses under the Pass Through section.

## **Advertisements:**

Advertise specials that your organisation may have, or charge companies to use the HS960 Wireless Gateway for advertisements. The adverts will be pop-ups that appear while a subscriber is surfing the Internet.

## **Filtering:**

Decide which websites you want to restrict access to (e.g. competitors, X-rated sites, download sites).

## 1-1 Package Contents

The following items are included in your HS960

- HS960



- One HS960
- Two antennas
- One AC Power Adapter for HS960
- One CD containing a User Manual
- Two screws for wall-mount
- One UTP Ethernet/Fast Ethernet cable (Cat.5 Twisted-pair)
- **AG-200E Account Generator Printer**



- One AC Power Adapter for mini account generator printer
- One UTP Ethernet/Fast Ethernet cable (Cat.5 Twisted-pair)
- One Account Generator Printer User's Guide

If any of the above items are damaged or missing, please contact your dealer immediately.

## 1-2 Features

- Wireless data rates up to 54Mbps
- Supports 100 Simultaneous Users
- Built-in AAA (Authentication/Accounting/Authorization) and Billing mechanism
- IP Plug and Play (iPnP)
- Comprehensive security
  - 64/128-bit WEP encryption
  - WPA encryption
  - IP/URL filtering
- Intelligent Management

*Note: The "PnP" Function only can be used with TCP/IP-based Network.*

## 1-3 Precautions

- Never remove or open the cover. You may suffer serious injury if you touch these parts.
- Never install the system in the wet locations.
- Use only the original fitting AC power adapter otherwise there is a danger of severe electrical shock.
- Avoid exposing the HS960 to direct sunlight or another heat source.
- Choose a well-ventilated area to position your HS960 .

## 1-4 Overview of the HS960 Wireless Gateway

### 1-4-1 Top Panel LEDs Indication



LED	State	Description
PWR	Off	The HS960 is not receiving electrical power.
	Green	The HS960 is receiving electrical power.
SYS	Off	The HS960 status is defective.
	Green	The HS960 status is complete.
	Green (Blinking)	During firmware upgrades, this system LED will blink.
WAN	Off	Port has not established a network connection.
	Green	Port has established a valid 10/100Mbps network connection.
	Green (Blinking)	10/100Mbps traffic is traversing the port.
LAN-1~ LAN-4	Off	Port has not established any network connection.
	Green	A port has established a valid 10/100Mbps network connection.
	Green (Blinking)	10/100Mbps traffic is traversing the port.
WLAN	Off	The Wireless is not ready.
	Green	The HS960 has established a valid wireless connection.
	Green (Blinking)	The Wireless connection is active.



## 1-4-2 Rear Panel

The rear panel of the HS960 is shown below.



### 1. LAN (1-4):

The rear panel supports four auto-sensing RJ-45 ports and all ports can be auto-switched to MDI-II connections. The LAN ports are used for linking hosts or other network devices. The individual port can be either connected to 100BaseTX networks or 10BaseT networks. When connecting to a 100BaseTX network, the ports operate at 100Mbps in half-duplex mode or 200Mbps in full-duplex mode. When connecting to a 10BaseT network, the ports operate at 10Mbps in half-duplex mode or 20Mbps in full-duplex mode.

### 2. WAN

One Ethernet port used for linking xDSL or Cable Modem.

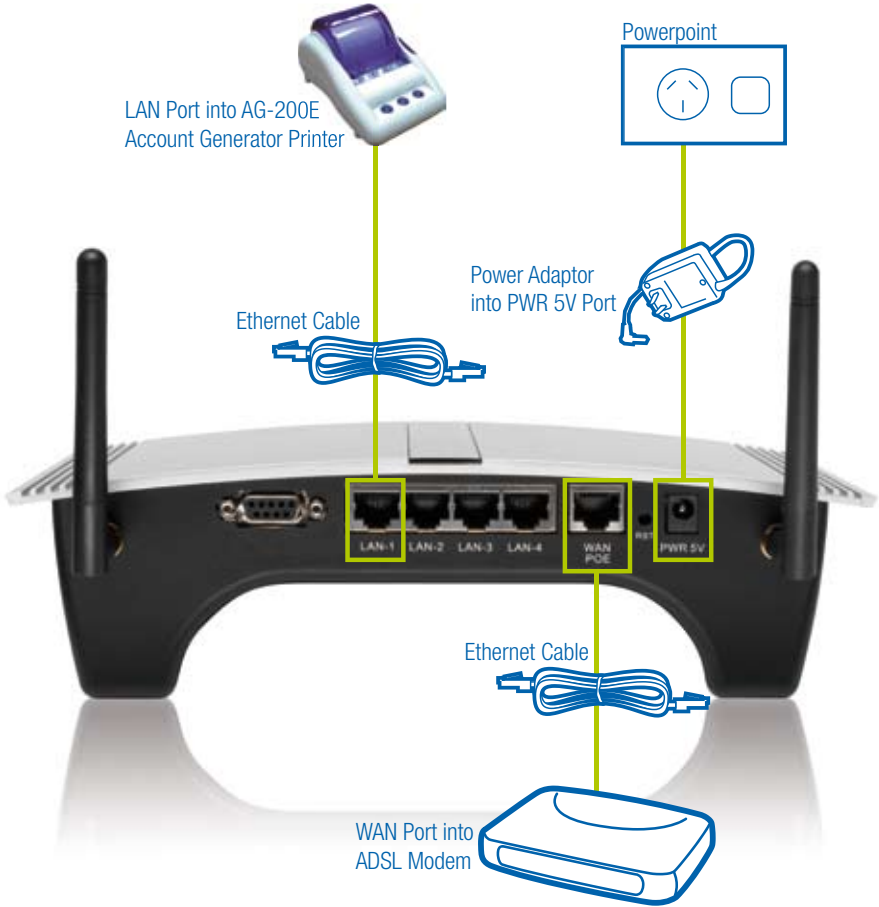
### 3. Reset Button:

The HS960 has a reset button at the rear panel of the device. Use this function to reset the system back to factory defaults.

### 4. Power Jack

Used to connect the external power supply with the HS960.

## 1-4-3 Connection Diagram



## 1-5 Technical Specifications

### 1-5-1 Hardware Specifications

#### Network Specification

- IEEE802.3 10BaseT Ethernet
- IEEE802.3u 100BaseTX Fast Ethernet
- IEEE802.11g Wireless LAN
- ANSI/IEEE 802.3 NWay auto-negotiation
- Wi-Fi Compatible

#### Connectors

- Four LAN Ports (10BaseT/100BaseTX Auto cross-over)
- One WAN Port (10BaseT/100BaseTX Auto cross-over)

#### Encryption

- WEP (Wired Equivalent Privacy) 64/128-bit RC4
- WPA (Wi-Fi Protected Access)

#### External Antenna Type

- 2dBi (Max) Dual detachable diversity antenna with reverse SMA

#### LED Indicators

- One POWER LED
- One WAN 10/100M Link/Activity LED
- Four LAN 10M/100M Link/Activity LEDs
- One Wireless Link/Activity LED
- One System LED

#### Power Requirement

- External Power Adapter
- Input: 100-240 VAC, 50/60 Hz
- Output: 5V, 2A

#### Environment Conditions

- Operating Temperature: 0 to 50°C
- Storage Temperature: -10 to 60°C
- Operating Humidity: 10~80% non-condensing
- Storage Humidity: 10% to 90% non-condensing

#### Certifications

- FCC part 15 Class B, CE, CSA, VCCI Class B, CE / R&TTE, C-Tick

#### Dimension

- Size: 242 (L) x 130.5 (W) x 77 (H) mm
- Weight: About 420g (Net)

#### Mounting

- Desktop, Wall mounted

## 1-5-2 Software Specifications

### Networking

- IEEE802.3 10BaseT Ethernet
- IEEE802.3u 100BaseTX Fast Ethernet
- IEEE802.3af Power over Ethernet
- IEEE802.11b Wireless LAN
- IEEE802.11g Wireless LAN
- Supports 100 Simultaneous Users
- IP Plug and Play (iPnP)
- HTTP Proxy Support
- SMTP Server Redirection
- DHCP Server
- DHCP Relay
- Static IP WAN Client
- DHCP WAN Client
- PPPoE WAN Client
- PPTP WAN Client
- NAT
- NTP (Network Time Protocol) Support
- DDNS

### Marketing Cooperation

- Advertisement URL link
- Walled garden
- Customizable log-on and log-off pages
- Portal Page
- WISPr Smart Client

### User Accounting and Authentication

- Built-in Authentication
- Web-based Authentication
- RADIUS AAA Support (RFC 2865, 2866)
- Secondary RADIUS
- User Authentication and Accounting
- Logout Window Timer Control

### Security and Firewall

- Layer 2 Isolation Security
- SSL User Login page/ Configuration Page
- SSL Administration
- VPN Pass through (IPSec/PPTP)
- Customize SSL Certificate
- Pass Through IP/MAC/URL Address
- Restricted Destination Filtering IP/URL
- VPN (IPSec/PPTP) Pass through
- PPTP VPN Client
- WEP
- WPA

## Management

- Web-based Management Tool
- Firmware Upgrade via HTTP/TFTP
- Wizard setup for step-by-step Configuration
- Backup/Restore/Factory Default Setting
- Remote Authorized Management
- Real-time Session List
- LAN Device Management
- Syslog (System/Subscriber/LAN device)
- E-mail logs
- SNMP v1/v2 (MIB II, Private MIB)
- System Information Table
- Status Report (Daily/Monthly/System/Network)
- SSL certificate upload

## Extra Function with optional AG-200E

- Local Authentication
- Local Accounting
- Local Billing

## AG-200E Account Generator (Thermal Printer)

- Interface: Ethernet
- Print Width: 48mm (Paper width: 58mm)
- Paper Length: 50 M

## 2. INSTALLATION

### 2-1 Wall-Mounting

The HS960 can be wall-mounted by applying the two mounting brackets supplied.

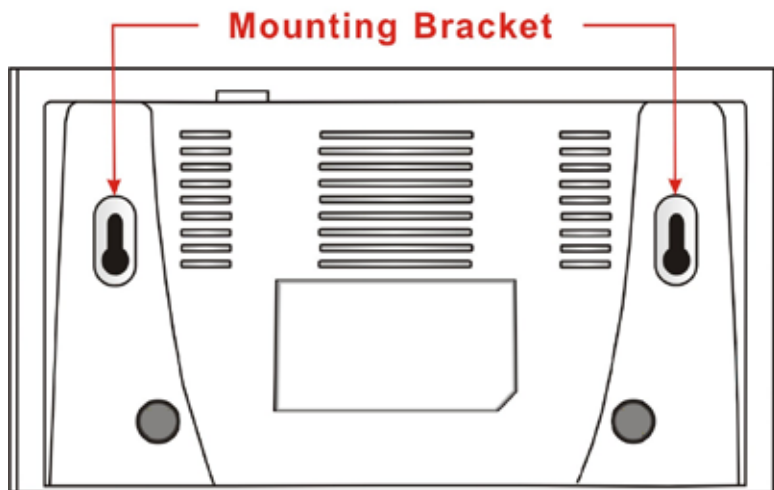


Figure 2-1 Wall-Mounting Bracket - Bottom of HS960

1. Install two screws on a wall according to the relative positions shown below.

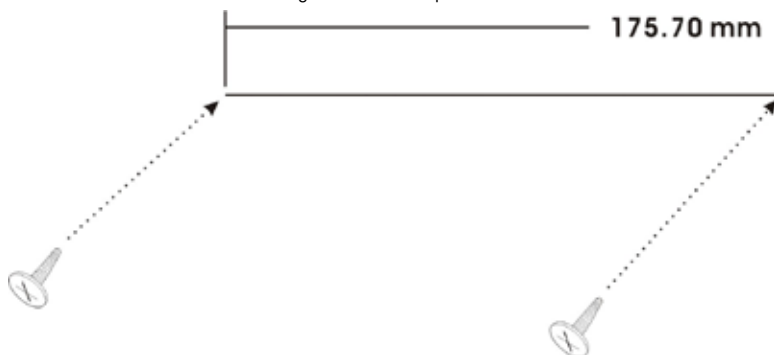


Figure 2-2

2. Hang HS960 on the wall by sliding the two screws in the mounting brackets.

*Note: If the screws are not properly anchored, the strain of the cables connected to the HS960 rear panel connectors could pull out the HS960 from the wall.*

## 2-2 Connecting the Antennas

The HS960 provides two antenna connectors on the rear of the unit.

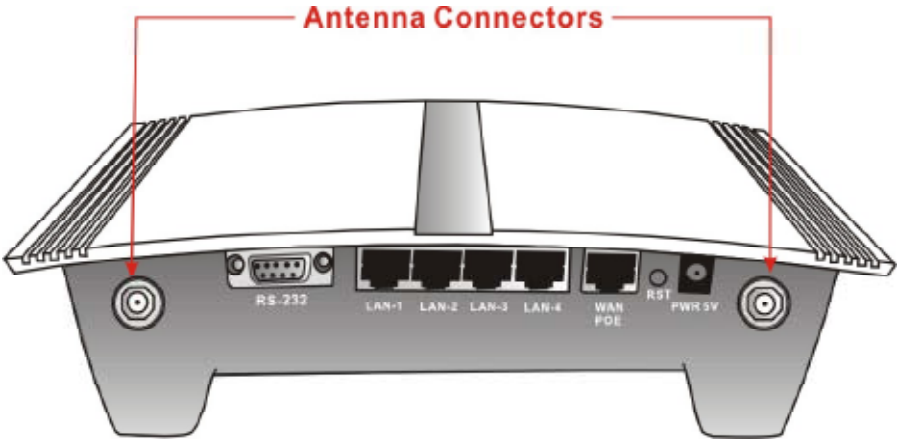


Figure 2-3 Antenna Connectors

## 2-3 Installation Requirements

Before installing the HS960 please ensure your network meets the following requirements.

### System Requirements

The HS960 requires one of the following types of software:

- Windows 98 Second Edition/NT/2000/XP
- Red Hat Linux 7.3 or later version
- MAC OS X 10.2.4 or later version
- Any TCP/IP-enabled systems like Mac OS and UNIX (TCP/IP protocol installed)
- Standard phone line for xDSL modem
- Or  
Coaxial cable for Cable modem
- Web Browser Software (Microsoft I.E 5.0 or later version or Netscape Navigator 5.0 or later version)
- One computer with an installed 10Mbps, 100Mbps or 10/100Mbps Ethernet card
- UTP network Cable with a RJ-45 connection

*Note: Prepare twisted-pair cables with RJ-45 plugs. Use Cat.5 cable for all connections. Make sure each cable does not exceed 100 meters.*

## ISP Requirements

Verify whether your ISP uses fixed or dynamic IP addressing. If it is a fixed IP, be sure to get the IP from your ISP.

### Dynamic IP

- Dynamic IP Setting

### Fixed IP

- Your fixed IP address for the HS960
- Your subnet mask for the HS960
- Your default gateway IP address
- Your DNS IP address

### PPPoE

- Your user name from your ISP
- Your password from your ISP

### PPTP

- PPTP Server IP Address from your ISP
- PPTP Local IP address from your ISP.
- PPTP Local IP subnet mask from your ISP.
- Your user name from your ISP
- Your password from your ISP

## Your PC Requirements

### The Static IP settings for the PC

- Your PC's fixed IP address
- Your PC's subnet mask
- Your PC's default gateway IP address
- Your PC's primary DNS IP address

#### *Note:*

1. The gateway's default IP address setting is "10.59.1.1".
2. The gateway's default subnet mask setting is "255.0.0.0".

## The Dynamic IP settings for the PC

We recommend that you leave your IP settings as automatically assigned. By default, the HS960 is a DHCP server, and it will give your PC the necessary IP settings.



## 2-4 Getting Started

1. Place the HS960 and AG-200E Printer on a flat work surface.
2. Connect the Ethernet cable to the HS960's LAN port.
3. Connect the other end of the Ethernet cable to the AG-200E Account Generator Printer's RJ45 port.
4. Ensure that your modem and computer are both switched on.
5. Use the supplied cable to connect the HS960's WAN port to the modem. Check that the Cable/xDSL Status LED lights.
6. Connect your computer to one of the 10/100 LAN ports on the HS960 . Check that the LAN Port Status LED lights.
7. Configure the further parameters via a Web browser.

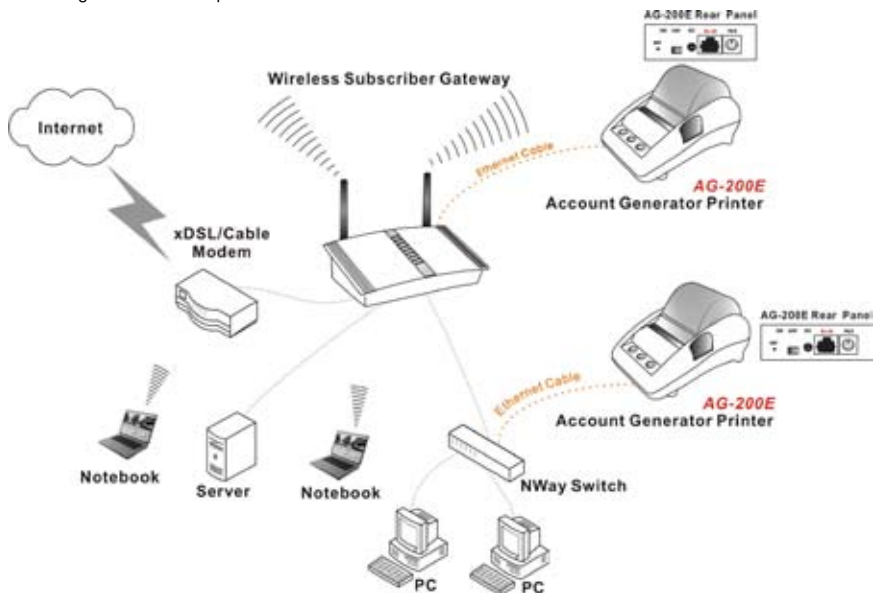


Figure 2-4 HS960 Connection

## 2-5 POE (Power over Ethernet) Application

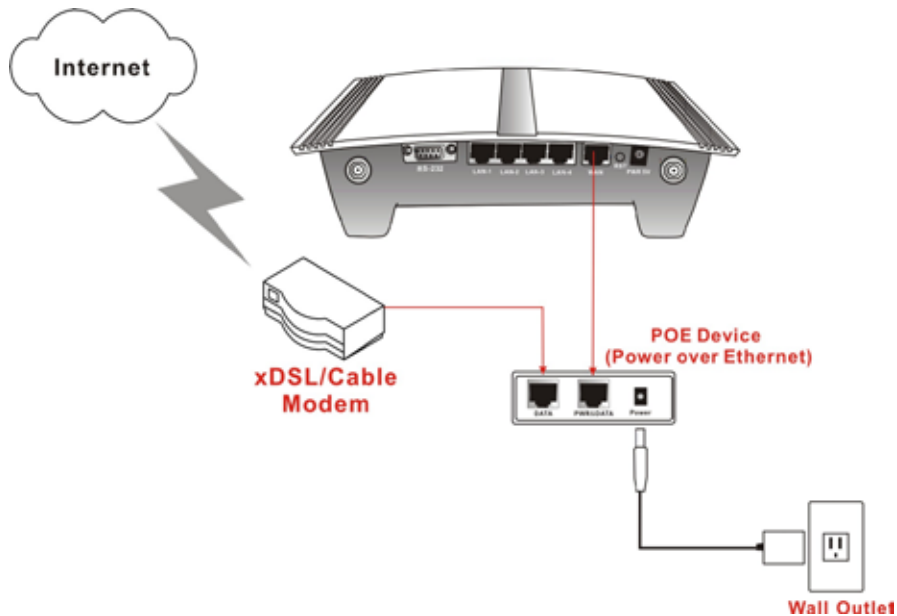


Figure 2-5 POE Connection

Note: To use the HS960's POE feature, follow the instructions for your specific POE device.

## 3. CONFIGURING THE HS960

### 3-1 Set Up Wizard

#### 3-1-1 Startup

Start your browser, and then enter the factory default IP address 10.59.1.1 in your browser's location box. Press Enter.

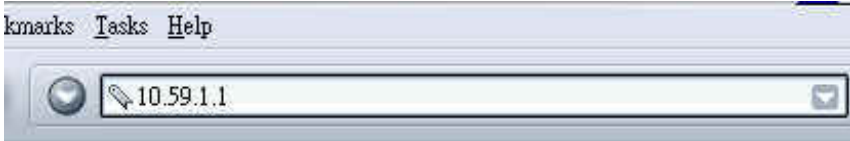


Figure 3-1 Web Browser Location Field (Factory Default)

#### 3-1-2 Configuration

The HS960 menu will appear. In the Username and Password field, type the factory default user name **admin** and password **admin** and click **Login**.



Figure 3-2 Configuration Tools Menu

If you are first time setting the system, the wizard setup screen will appear. You will be guided, step-by-step, through a basic setup procedure.



Figure 3-3 wizard set up screen

**System**

System/Host Name		Firmware Version	1.00.09
Location Name		Domain Name	
System Time	2006/10/25 19:00:00	System Up Time	00:09:10:1M:25S
WAN MAC address	00:13:4B:8B:0C:95	LAN MAC address	00:13:4B:8B:0C:95

**Network**

WAN Status	<b>Not Established</b>	WAN Type	DHCP Client
WAN IP Address	None	LAN IP Address	10.59.1.1
WAN Subnet Mask	None	LAN Subnet Mask	255.255.255.0
Default Gateway	None	DNS	

**Wireless**

Wireless Service	OK	ESSID	Wireless
Wireless Channel	6	Secure Mode	Disable

**Traffic**

WAN	Tx@Data:4445 Rx@Data:0 Tx@Error:0 Rx@Error:0
LAN	Tx@Data:675421 Rx@Data:161520 Tx@Error:0 Rx@Error:0
Wireless	Tx@Data:0 Rx@Data:0 Tx@Error:0 Rx@Error:0

HS960 Powered by Handlink Technology

Figure 3-4 System Quick View

## 3-1-3 Internet Connection Settings

Select the appropriate Internet connection type to connect to your ISP. The HS960 device can work as a DHCP client. This allows the device to obtain the IP address and other TCP/IP settings from your ISP. If your xDSL/Cable comes with this feature, please enable Use DHCP Client.

**Internet Connection**

Please choose one from the following selections

DHCP Client

Your ISP will configure IP settings for you

**Next >**

Figure 3-5 Internet Connection Setting Screen

## Static IP Setting

If Static IP Setting is selected, then a secondary screen will appear. Enter the IP address information provided by your ISP here.

The screenshot shows a window titled "Internet Connection" with a blue header. Below the header, it says "Please choose one from the following selections" and has a dropdown menu with "Static IP Setting" selected. Below that, it says "You have static IP information from your ISP" in green. There are five input fields: "IP Address:" with "0.0.0.0", "Subnet Mask:" with "0.0.0.0", "Gateway IP address:" with "0.0.0.0", "Primary DNS Server:" (empty), and "Secondary DNS Server:" (empty). In the bottom right corner, there is an orange button with the text "Next >".

Figure 3-6 Internet Connection Setting Screen—Static IP Setting

Item	Default	Description
IP Address	0.0.0.0	Enter the IP address provided by your ISP.
Subnet Mask	0.0.0.0	Enter the subnet mask for the IP address.
Gateway IP Address	0.0.0.0	Enter the Gateway IP Address provided by your ISP.
Primary DNS Server	Empty	Enter the primary DNS server IP address for the xDSL/Cable connection (provided by your ISP).
Secondary DNS Server	Empty	Enter the secondary DNS server IP address for the xDSL/Cable connection (provided by your ISP).

## PPPoE (Point-to-Point Protocol over Ethernet)

If “PPPoE” is selected, then this screen will appear. Enter the username, password and other major fields.

Figure 3-7 Internet Connection Setting Screen—PPPoE Setting

Item	Default	Description
<b>Username</b>	Empty	Enter the user name provided by your ISP. The user name can consist of up to 80 alphanumeric characters and is case sensitive.
<b>Password</b>	Empty	Enter the user password provided by your ISP. The password can consist of up to 80 alphanumeric characters and is case sensitive.
<b>PPP MTU Setting</b>	1492	MTU (Maximum Transfer Unit) specifies maximum transmission unit size.
<b>TCP MSS Setting</b>	1452	MSS (Maximum Segment Size) specifies maximum segment size.
<b>Service Name</b>	Empty	Enter the service name provided by your ISP. The service name can consist of up to 64 alphanumeric characters and is case sensitive.
<b>Connect on Demand and Max Idle Time</b>		
<b>Connect on Demand</b>	Enable	You can configure your HS960 to cut your connection with your ISP after a specified period of time (Max Idle Time). If you have been disconnected due to inactivity, Connect on Demand enables your HS960 to automatically re-establish your connection as soon as you attempt to access the Internet again. If you wish to activate Connect on Demand, click the radio button. If you want your Internet connection to remain, click the radio button of keep alive. The Max Idle Time maximum value is 65535 minutes.
<b>Max Idle Time</b>	10 Minutes	
<b>Keep alive and Redial Period</b>		
<b>Keep alive</b>	Disable	This option keeps your PPPoE enabled Internet access connected indefinitely, even when it sits idle. The Redial Period maximum value is 65535 seconds.
<b>Redial Period</b>	30 Seconds	

## PPTP Client (Point-to-Point Tunneling Protocol)

If “PPTP” is selected, then this screen will appear. Fill out all the information provided by your ISP.

### Internet Connection

Please choose one from the following selections

PPTP (Mostly for Europe ADSL modem users) ▾

**Your ISP requires you to input username / password / PPTP setting**

My IP Address:

My Subnet Mask:

Gateway IP address:

PPTP Server IP Address:

Username:

Password:

PPP MTU Setting:

TCP MSS Setting:

Connection ID/Name:

**Connect on Demand**      Max Idle Time:  Min.

**Keep alive**      Redial Period:  Sec.

**Next >**

Figure 3-8 Internet Connection Setting Screen—PPTP Client Setting



Item	Default	Description
<b>My IP Address</b>	Empty	Enter the PPTP local IP address provided by your ISP.
<b>My Subnet Mask</b>	Empty	Enter the PPTP local Subnet Mask IP address for the IP address (My IP Address).
<b>Gateway IP Address</b>	Empty	Enter the PPTP server Gateway IP address provided by your ISP.
<b>PPTP Server IP Address</b>	Empty	Enter the PPTP server IP address provided by your ISP.
<b>Username</b>	Empty	Enter the user name provided by your ISP. The user name can consist of up to 80 alphanumeric characters and is case sensitive.
<b>Password</b>	Empty	Enter the user password provided by your ISP. The password can consist of up to 80 alphanumeric characters and is case sensitive.
<b>PPP MTU Setting</b>	1460	MTU (Maximum Transfer Unit) specifies maximum transmission unit size.
<b>TCP MSS Setting</b>	1400	MSS (Maximum Segment Size) specifies maximum segment size.
<b>Connection ID/Name</b>	Empty	Enter the connection ID or connection name. The connection ID/Name can consist of up to 81 alphanumeric characters and is case sensitive.
<b>Connect on Demand and Max Idle Time</b>		
<b>Connect on Demand</b>	Enable	You can configure your HS960 to cut your connection with your ISP after a specified period of time (Max Idle Time). If you have been disconnected due to inactivity, Connect on Demand enables your HS960 to automatically re-establish your connection as soon as you attempt to access the Internet again. If you wish to activate Connect on Demand, click the radio button. If you want your Internet connection to remain, click the radio button of keep alive. The Max Idle Time maximum value is 65535 minutes.
<b>Max Idle Time</b>	10 Minutes	
<b>Keep alive and Redial Period</b>		
<b>Keep alive</b>	Disable	This option keeps your PPTP enabled Internet access connected indefinitely, even when it sits idle. The Redial Period maximum value is 65535 seconds.
<b>Redial Period</b>	30 Seconds	

## 3-1-4 Wireless Setting

This page allows you to define ESSID, Channel ID and WEP/WPA encryption for wireless connections.

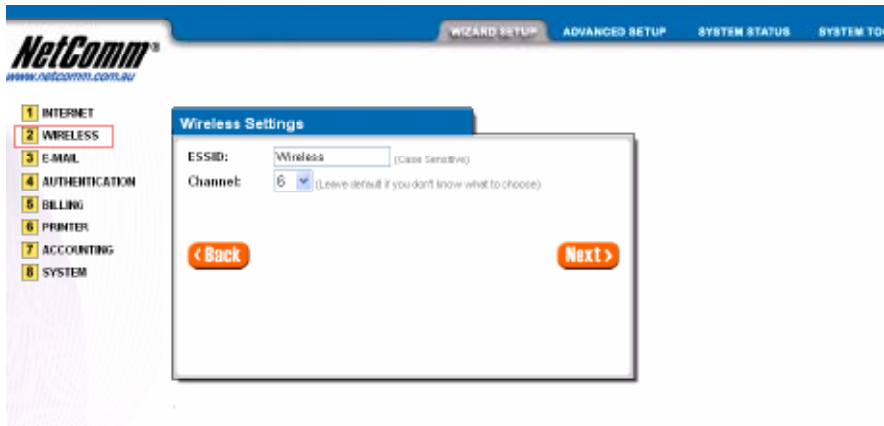


Figure 3-9 Wireless Setting Screen

Item	Default	Description
ESSID	Wireless	The ESSID is the unique name that is shared among all points in a wireless network. It is case sensitive and must not exceed 32 characters.
Channel	6	Enter the channel ID for wireless connection.

## 3-1-5 E-mail Server Setting

The HS960 allows the entry of an extra Email server parameter to forward the subscriber's E-mail.

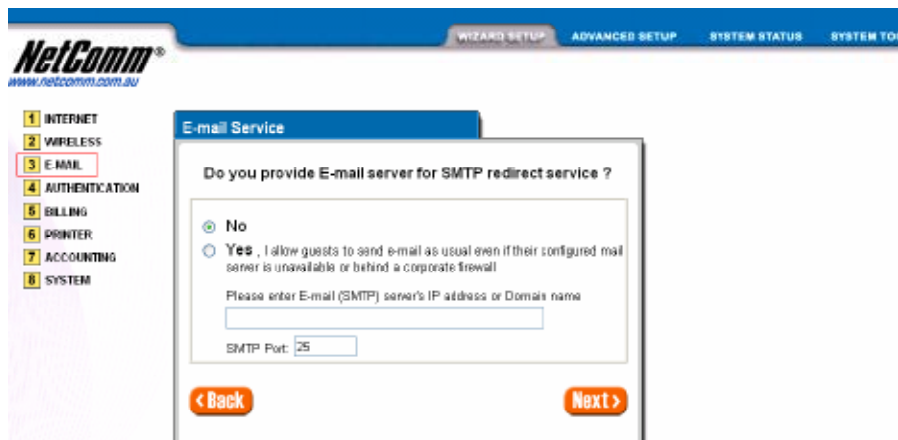


Figure 3-10 E-mail Service Setting Screen

Item	Default	Description
Email Server Redirect	No	Disables or enables email server redirect function. The HS960 provides an extra Email server parameter to forward the subscriber's Email.
Email Server's IP address or Domain name	Empty	Before setting this field, please make sure the E-mail sever relay function is open. Enter the email server IP address or domain name. The field must not exceed 50 characters.
SMTP Port	25	Enter the SMTP port. The SMTP port allowed range is 25 or 2500 to 2599.

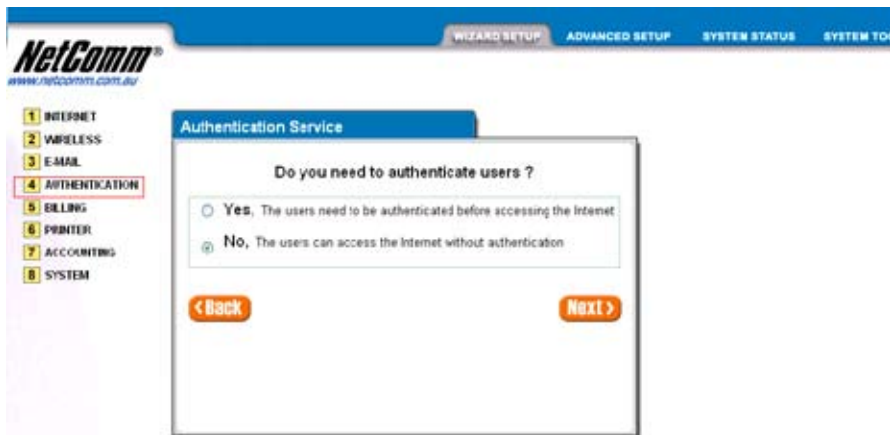


Figure 3-11 Authentication Service Setting Screen

Item	Default	Description
Built-in Authentication/ No Authentication	No No Authentication	<b>Yes</b> The HS960 has inbuilt authentication software. If Yes is selected, accounts are generated on demand by the HS960, and the system will authenticate the subscriber login according to the generated account.
		<b>No</b> Subscriber can directly access the Internet without entering a username and password.

## 3-1-7 Billing Profile Settings

This function is used to setup the billing profiles. The billing profiles are linked to the three buttons on the printer and allocate how you want to charge the customer.

**NetComm**  
www.netcomm.com.au

WEAK SETUP    ADVANCED SETUP    SYSTEM STATUS    SYSTEM TOOLS

1 INTERNET  
2 WIRELESS  
3 E-MAIL  
4 AUTHENTICATION  
**5 BILLING**  
6 PRINTER  
7 ACCOUNTING  
8 SYSTEM

### Billing Profile

What is your service and price plan ?

- Time to Finish**  
The subscriber can access Internet only one time with one account. Once subscriber login, the pre-defined usage time will start until run out when the subscriber stop to access the internet before run out.
- Accumulation**  
The subscriber can access Internet several times with one account. The system can keep and accumulate every single usage time until the pre-defined usage time run out.

**Service and Price Plan**

Currency: \$ ( Number of decimals places: 2 )

No.	Name (max. 12 char.)	Usage time	Charge
01	30 minutes	30 minutes	1.00
02	1 hour	1 hour	2.00
03	2 hours	2 hour	3.00

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Figure 3-12 Billing Profile Setting Screen

Item	Default	Description
Service	Time to Finish	<b>Time to Finish</b> The subscriber can access Internet only once with one account. Once subscriber has logged in, the pre-defined usage time will start and will run until the time runs out, even if the subscriber logs out and is not active, once activated the time expires after the physical time elapses.
		<b>Accumulation</b> The subscriber can access the Internet multiple times and on multiple occasions with the one account. The system will accumulate every individual usage times, until the pre-defined usage time runs out.
Currency	\$	Enter the appropriate currency unit or currency symbol.
Number of decimal places	2	Enter the billing decimal value. The field maximum value is 3.
Name	30 minutes/1 hour/ 2 hours	This is the name of billing profile. The maximum allowed characters length is 12.
Usage Time	30 minutes/1 hour/ 2 hours	The duration of the billing period. When this period expires, user account will be discontinued.
Charge	1.00/2.00/3.00	Enter the charge amount for the Internet service. The amount maximum value is 999999.

## 3-1-8 Account Generator Printer Setting

There are two different choices to set up the printer. The first is an exclusive printer (Account Generator Printer), and the other is non-exclusive printer. The exclusive printer is a portable thermal printer that is integrated with HS960. This allows the pressing of one button to generate accounts and receipt immediately without needing an operating PC. A non-exclusive printer can use the PC Web-based browser to print out user accounts.

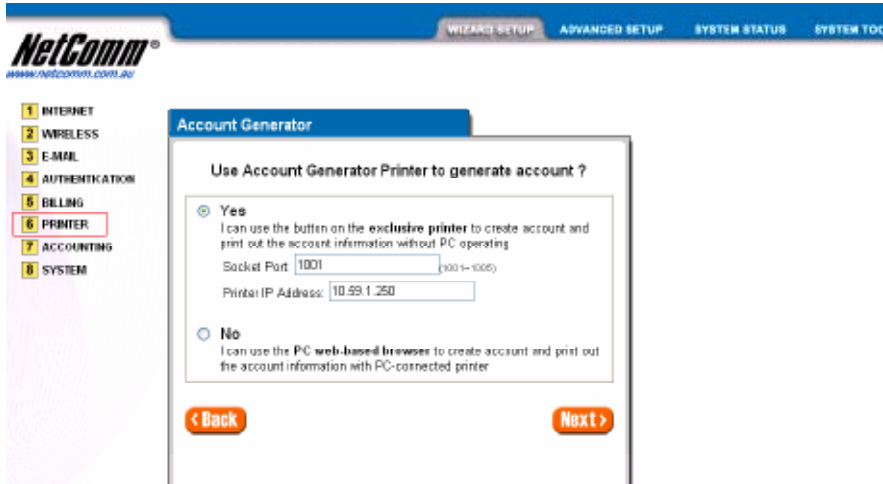


Figure 3-13 Printer Setting Screen

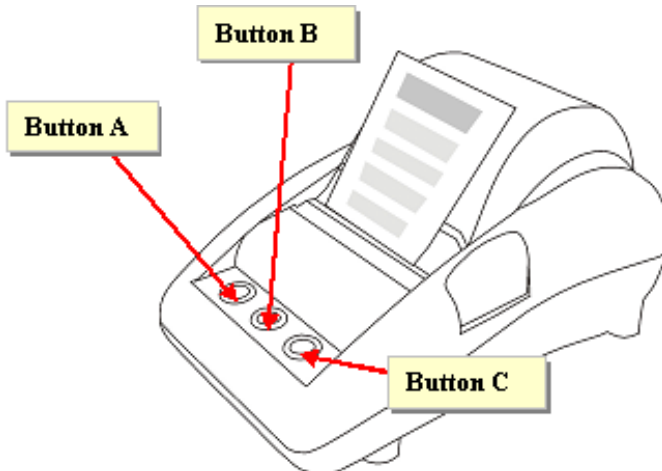


Figure 3-14 Account Generator Printer

## 3-1-9 Accounting Setting

### Three-buttons Printer Setting

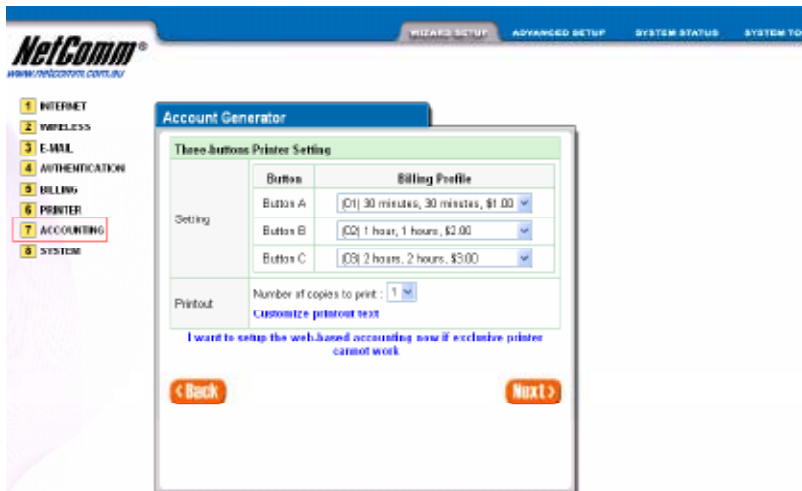


Figure 3-15 Accounting Setting Screen (Three Buttons Printer)

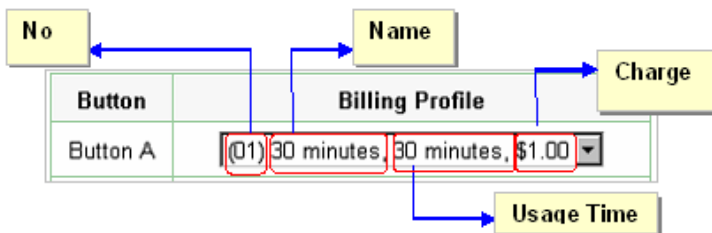


Figure 3-16 Billing Profile Setting Screen

Item	Default	Description
Button A~ C	01	Defines each button's billing profile. Select one billing profile by clicking in the list box.
<b>Printout</b>		
Number of copies to print	1	The system allows you to print multiple copies of the receipts. This value is number of copies you would like to set as the default.
Customize Printer Text	This function allows you to produce customised text on the receipt based on your requirements.	

## Web-based Account Generator Setting

Account Generator

Web-based Account Generator Setting
Preview / Operate

Setting	Button	Billing Profile
	Button A	(01) 30 minutes, 30 minutes, \$1.00 ▾
	Button B	(02) 1 hour, 1 hours, \$2.00 ▾
	Button C	(03) 2 hours, 2 hours, \$3.00 ▾

Printout      Number of copies to print :  ▾

Customize printout text

Please set your password for web-based account generator

Username	<input style="width: 90%;" type="text" value="account"/>	
Password	<input style="width: 90%;" type="password" value="*****"/>	Confirm: <input style="width: 90%;" type="password"/>

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Figure 3-17 Web-based Account Generator Setting Screen

Item	Default	Description
Password	account	Enter the password for web-based account generator. The password can consist of up to 80 alphanumeric characters and is case sensitive.
Confirm	Empty	Enter the password for confirmation.

Preview / Operate

Click on button to preview and operate account generator panel.



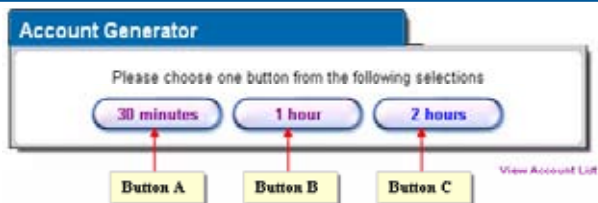


Figure 3-18 Account Generator Panel

Click on button to create a new account.



Figure 3-19 Example-Account Printout

Click "View Account List" to display current account information.

**ACCOUNT LIST**

List existing account's information. [Refresh](#)

S/N	Status	Username	Usage Time	Time Created	Login Time	Expiration Time	Delete
000001	Un-used	2266652	0:00:00	2002/3/3 21:21:51		2002/3/4 09:21:51	<input type="checkbox"/>
1000	In-use	149428	2:00:00	2002/3/3 21:22:28	2002/3/3 21:23:56	2002/3/3 23:23:56	<input type="checkbox"/>

[Home](#) | [Page](#)

[First](#) | [Previous](#) | [Next](#) | [End](#)

Figure 3-20 Account List

Note: This page will refresh automatically every 5 minutes.

## Customise Printout Text

This function allows you to produce custom receipts.

### CUSTOMIZATION

Account Printout Customization	
<input type="checkbox"/> Logo	* Only for PC-connected printer
Title:	<input type="text" value="Welcome!"/> (Max=10)
Subtitle:	<input type="text" value="Hotspot Internet Service"/> (Max=60)
Username:	<input type="text" value="Username"/> (Max=24)
Password:	<input type="text" value="Password"/> (Max=24)
<input checked="" type="checkbox"/> Billing Method	Time To Finish: <input type="text" value="Billing Time to Finish"/> (Max=24) Accumulation: <input type="text" value="Billing Accumulation"/> (Max=24)
<input checked="" type="checkbox"/> Billing Profile:	<input type="text" value="Service"/> (Max=24)
<input checked="" type="checkbox"/> Purchase Unit:	<input type="text" value="Unit"/> (Max=24)
Usage Time:	<input type="text" value="Usage Time"/> (Max=24)
<input checked="" type="checkbox"/> Price:	<input type="text" value="Total"/> (Max=24)
Tax:	Tax: <input type="text"/> (Max=24) TOTAL: <input type="text" value="Grand Total"/> (Max=24)
<input checked="" type="checkbox"/> ESSID:	<input type="text" value="ESSID"/> (Max=24)
Wireless Security	WPA: <input type="text" value="WPA"/> (Max=24)
	WEP: <input type="text" value="WEP"/> (Max=24)
<input type="checkbox"/> Additional Label 1:	<input type="text"/> (Max=24) Value: <input type="text"/> (Max=24)
<input type="checkbox"/> Additional Label 2:	<input type="text"/> (Max=24) Value: <input type="text"/> (Max=24)
<input checked="" type="checkbox"/> Print out Time:	Format: <input type="text" value="yyyy/mm/dd"/> <input type="text" value="HH:mm:ss"/> (HH:24; 05:12; 0.000PM)
<input checked="" type="checkbox"/> Expiration Time:	Description: <input type="text" value="Please activate your account before"/> (Max=240)
	Format: <input type="text" value="yyyy/mm/dd"/> <input type="text" value="HH:mm:ss"/> (HH:24; 05:12; 0.000PM)
	Accumulation: <input type="text" value="Please finish your usage time within 3 months after your first login"/> (Max=240)
<input checked="" type="checkbox"/> Ending:	<input type="text" value="Thank you very much!"/> (Max=24*10)

[Review of PC-connected printer](#)  
[Review of account generator printer](#)  
[Review of Post-Paid Printout](#)

Apply

Figure 3-21 Printer Customisation Setting Screen

## 3-1-10 System Setting

Figure 3-22 System Setting Screen

Item	Default	Description
Username	admin	Enter the user name. The user name can consist of up to 80 alphanumeric characters and is case sensitive.
Password	admin	Enter the user password. The password can consist of up to 80 alphanumeric characters and is case sensitive.
Confirm	Empty	Enter the password of administrator for confirmation.
System date & time	YYYY/MM/DD HH:MM:SS	<div style="text-align: center; border: 1px solid gray; padding: 5px; width: fit-content; margin: 0 auto;">Get from my Computer</div> <p>Click Get from my Computer button to correct the system date and time.</p>
Secure Administrator IP Address	All	This function allows a remote user to management the device. You can specify one or any IP addresses for remote control of the system.

**FINISH**

Click the button to save the settings then the system will restart.

The Advanced Settings enable you to configure the advanced settings related to accessing the Internet, including,

- |                       |                            |
|-----------------------|----------------------------|
| 1. System             | ▶ <b>SYSTEM</b>            |
| 2. WAN/LAN            | ▶ <b>WAN / LAN</b>         |
| 3. Server             | ▶ <b>SERVER</b>            |
| 4. Authentication     | ▶ <b>AUTHENTICATION</b>    |
| 5. RADIUS             | ▶ <b>RADIUS</b>            |
| 6. Billing            | ▶ <b>BILLING</b>           |
| 7. Accounting         | ▶ <b>ACCOUNTING</b>        |
| 8. Credit Card        | ▶ <b>CREDIT CARD</b>       |
| 9. Keypad             | ▶ <b>KEYPAD</b>            |
| 10. Customization     | ▶ <b>CUSTOMIZATION</b>     |
| 11. Pass Through      | ▶ <b>PASS THROUGH</b>      |
| 12. Filtering         | ▶ <b>FILTERING</b>         |
| 13. Share             | ▶ <b>SHARE</b>             |
| 14. Portal Page       | ▶ <b>PORTAL PAGE</b>       |
| 15. Advertisement     | ▶ <b>ADVERTISEMENT</b>     |
| 16. Walled Garden     | ▶ <b>WALLED GARDEN</b>     |
| 17. DDNS              | ▶ <b>DDNS</b>              |
| 18. LAN Devices       | ▶ <b>LAN DEVICES</b>       |
| 19. Syslog            | ▶ <b>SYSLOG</b>            |
| 20. Session Trace     | ▶ <b>SESSION TRACE</b>     |
| 21. Bandwidth         | ▶ <b>BANDWIDTH</b>         |
| 22. Secure Remote     | ▶ <b>SECURE REMOTE</b>     |
| 23. SNMP              | ▶ <b>SNMP</b>              |
| 24. Wireless          | ▶ <b>WIRELESS</b>          |
| 25. Account Generator | ▶ <b>ACCOUNT GENERATOR</b> |

## 3-2-1 System

Define the HS960 System configuration.

SYSTEM	
System/Host Name	<input type="text"/>
Domain Name	<input type="text"/>
Location Information	Location Name: <input type="text"/> (Max=50)
	Address: <input type="text"/> (Max=200)
	City: <input type="text"/> (Max=50)
	State / Province: <input type="text"/> (Max=50)
	Zip/Postal Code: <input type="text"/> (Max=10)
	Country: <input type="text"/> (Max=50)
	Contact Name: <input type="text"/> (Max=50)
	Contact Telephone: <input type="text"/> (Max=50)
	Contact FAX: <input type="text"/> (Max=50)
Contact Email: <input type="text"/> (Max=50)	
Date/Time	Date: 2005 / 2 / 1 (From Month/Day)
	Time: 11 : 24 : 15 (Hour : Minute : Second)
	<input type="button" value="Get from my Computer"/> <input type="button" value="Get from NTP server"/>
	<input type="checkbox"/> NTP Synchronization
	Server IP/Domain Name: <input type="text"/>
	Time Zone: GMT -12:00
	Update Time: 0 hours
	<input type="checkbox"/> Daylight Saving Time
	Start Date: 4 Month / 1 Day
	End Date: 10 Month / 31 Day

Figure 3-23 System Setting Screen

NAT (Network Address Translation)	<input checked="" type="radio"/> Enable <input type="checkbox"/> IP Plug and Play <input type="radio"/> Disable
User Session Limited	<input checked="" type="radio"/> Enable 30 (1-1024) <input type="radio"/> Disable
Layer 2 Isolation Security	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Secure administrator IP addresses	<input checked="" type="radio"/> Any <input type="radio"/> Specify 1 <input type="text"/> <input type="text"/> 2 <input type="text"/> <input type="text"/> 3 <input type="text"/> <input type="text"/> 4 <input type="text"/> <input type="text"/> 5 <input type="text"/> <input type="text"/>
Malicious Pass Through	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Allow remote user to ping this device	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
SSL Certificate	<input checked="" type="radio"/> Default <input type="radio"/> Customer Certificate

Figure 3-24 System Setting Screen

Item	Default	Description
System/Host Name	Empty	The system name can consist of up to 40 alphanumeric characters.
Domain Name	Empty	The Domain name can consist of up to 80 alphanumeric characters.
Location Information	Empty	Enter your location information.
Item	Default	Description
<b>NAT (Network Address Translation)</b>		
NAT	Enable	Enables or disables NAT Address Translation function.
User Session Limited	Enable,30	Enables or disables user session limit function. This feature provides you with an ability to control a number of sessions allowed for particulars user(s) at the one time.
IP Plug and Play (iPnP Technology)	Enable	Enables or disables plug & play function. When enabled, the user needn't change their network configuration to access the Internet.
Layer 2 Isolation Security	Enable	If enable plug and play is selected, you can enable Layer 2 Isolation Security function. When the "Layer 2 Isolation Security" enabled, your users will be unable to see each other on the network.
Secure administrator IP Addresses	Any	Administrator can specify 5 IP addresses or a range to allow remote control access from network.
Multicast Pass Through	Disable	This function allows for multiple transmissions to specific recipients at same time.
Allow remote user to ping the device	Enable	This function allows remote user to ping the HS960 through Internet.
SSL Certificate	Default	Option: default or customise certificate. There are two ways to create a certificate. The first is to purchase a certificate from a certificate authority and another is creating a self-certificate.

Click Apply button, then Restart dialog box will appear. Click Apply to restart the system.

## RESTART

**Do you want to restart the system ?**

Figure 3-25 Restart Dialog Box

## 3-2-2 WAN/LAN

### WAN / LAN

<b>LAN</b>	<p>The Device IP Address and Subnet mask settings</p> <p>IP Address: <input type="text" value="10.59.1.1"/></p> <p>Subnet Mask: <input type="text" value="255.255.255.0"/></p>
<b>WAN MAC Address</b>	<p><input checked="" type="radio"/> Default</p> <p><input type="radio"/> Change to: <input type="text" value="00"/> : <input type="text" value="00"/> : <input type="text" value="00"/> : <input type="text" value="00"/> : <input type="text" value="00"/> : <input type="text" value="00"/></p>
<b>WAN Port Mode</b>	<p><input checked="" type="radio"/> <b>DHCP Client</b> ( Mostly for Cable modem users or Local Area Network)</p> <p><input type="radio"/> <b>Static IP</b> ( Mostly for advanced Local Area Network environment)</p> <p><input type="radio"/> <b>PPPoE</b> ( Mostly for ADSL modem users)</p> <p><input type="radio"/> <b>PPTP</b> ( Mostly for Europe ADSL modem users)</p>
<p style="text-align: right;"><input type="button" value="Apply"/></p>	

Figure 3-26 WAN/LAN Setting Screen

Click Apply button to save the new settings.

Click Apply button, then Restart dialog box will appear. Click Apply to restart the system.

### RESTART

<p style="text-align: center;"><b>Do you want to restart the system ?</b></p>
<p style="text-align: center;"><input type="button" value="Apply"/></p>

Figure 3-27 Restart Dialog Box

## Device IP (LAN IP) Setting

### WAN / LAN

LAN	<b>The Device IP Address and Subnet mask settings</b>	
	IP Address:	<input type="text" value="10.59.1.1"/>
	Subnet Mask:	<input type="text" value="255.0.0.0"/>

Figure 3-28 Device IP (LAN IP) Setting

Item	Default	Description
IP Address	10.59.1.1	This identifies the internal LAN IP address of your HS960.
Subnet Mask	255.0.0.0	Enter the subnet mask for the IP address.

## WAN MAC Address

WAN MAC Address	<input checked="" type="radio"/> Default
	<input type="radio"/> Change to: <input type="text" value="00"/> : <input type="text" value="00"/> : <input type="text" value="00"/> : <input type="text" value="00"/> : <input type="text" value="00"/> : <input type="text" value="00"/>

Figure 3-29 WAN MAC Address Setting

Item	Description
IP Address	The default MAC address is set to the WAN physical interface on the device.



## WAN Port Mode

<b>WAN Port Mode</b>	<input checked="" type="radio"/> <b>DHCP Client</b> ( Mostly for Cable modem users or Local Area Network ) <input type="radio"/> <b>Static IP</b> ( Mostly for advanced Local Area Network environment ) <input type="radio"/> <b>PPPoE</b> ( Mostly for ADSL modem users ) <input type="radio"/> <b>PPTP</b> ( Mostly for Europe ADSL modem users )
----------------------	---

Figure 3-30 WAN Port Mode Setting

### DHCP Client

The HS960 device can work as a DHCP client. This allows the device to obtain the IP address and other TCP/IP settings from your ISP. If your xDSL/Cable comes with this feature, please enable Use DHCP Client.

**DHCP Client** ( Mostly for Cable modem users or Local Area Network )

Figure 3-31 DHCP Client Setting Screen

### Static IP

**Static IP** ( Mostly for advanced Local Area Network environment )

You have static IP information from your ISP

IP Address:	<input type="text" value="0.0.0"/>
Subnet Mask:	<input type="text" value="0.0.0"/>
Gateway IP address:	<input type="text" value="0.0.0"/>
Primary DNS Server:	<input type="text"/>
Secondary DNS Server:	<input type="text"/>

Figure 3-32 Static IP Setting Screen

Item	Description
<b>IP Address</b>	Enter the IP address for the xDSL/Cable connection (provided by your ISP).
<b>Subnet Mask</b>	Enter the subnet mask for the IP address.
<b>Gateway IP Gateway</b>	Enter the Gateway IP address for the xDSL/Cable connection (provided by your ISP).
<b>Primary DNS Server</b>	A primary DNS server IP address for the xDSL/Cable connection (provided by your ISP).
<b>Secondary DNS Server</b>	A secondary DNS server IP address for the xDSL/Cable connection (provided by your ISP). If the primary DNS Server IP is not available, the Secondary DNS Server IP will then be used.

## PPPoE

### **PPPoE** ( Mostly for ADSL modem users )

Your ISP requires you to input username / password

Username:

Password:

PPP MTU Setting:

TCP MSS Setting:

Service Name:

**Connect on Demand**

Max Idle Time:  Min.

**Keep alive**

Redial Period:  Sec.

Figure 3-33 PPPoE Setting Screen

Item	Default	Description
User Name	Empty	Enter your PPPoE account name. The user name can consist of up to 80 alphanumeric characters and is case sensitive.
Password	Empty	Enter your PPPoE password. The password can consist of up to 80 alphanumeric characters and is case sensitive.
PPP MTU Setting	1492	MTU (Maximum Transfer Unit) specifies maximum transmission unit size.
TCP MSS Setting	1452	MSS (Maximum Segment Size) specifies maximum segment size.
Item	Default	Description
Service Name	Empty	Enter the service name provided by your ISP. The service name can consist of up to 64 alphanumeric characters and is case sensitive.
<b>Connect on Demand and Max Idle Time</b>		
Connect on Demand	Enable	You can configure your HS960 to cut your connection with your ISP after a specified period of time (Max Idle Time). If you have been disconnected due to inactivity, Connect on Demand enables your HS960 to automatically re-establish your connection as soon as you attempt to access the Internet again. If you wish to activate Connect on Demand, click the radio button. If you want your Internet connection to remain, click the radio button of keep alive. The Max Idle Time maximum value is 65535 minutes.
Max Idle Time	10 Minutes	
<b>Keep alive and Redial Period</b>		
Keep alive	Disable	This option keeps your PPPoE enabled Internet access connected indefinitely, even when it sits idle. The Redial Period maximum value is 65535 seconds.
Redial Period	30 Seconds	

## PPTP

**PPTP** (Mostly for Europe ADSL modem users)

Your ISP requires you to input username / password / PPTP setting

My IP Address:

My Subnet Mask:

Gateway IP address:

PPTP Server IP Address:

Username:

Password:

PPP MTU Setting:

TCP MSS Setting:

Connection ID/Name:

**Connect on Demand** Max Idle Time:  Min.

**Keep alive** Redial Period:  Sec.

Figure 3-34 PPTP Setting Screen

Item	Default	Description
<b>My IP Address</b>	Empty	A PPTP local IP address for the xDSL/Cable connection (provided by your ISP).
<b>My Subnet Mask</b>	Empty	Enter the PPTP local IP address for the xDSL/Cable connection.
<b>Gateway IP Address</b>	Empty	A PPTP local default gateway for the xDSL/Cable connection (provided by your ISP).
<b>PPTP Server IP Address</b>	Empty	Enter the PPTP server IP address for the xDSL/Cable connection (provided by your ISP).
<b>Username</b>	Empty	Enter your PPTP account name. The user name can consist of up to 80 alphanumeric characters and is case sensitive.
<b>Item</b>	<b>Default</b>	<b>Description</b>
<b>Password</b>	Empty	Enter your PPTP password. The password can consist of up to 80 alphanumeric characters and is case sensitive.
<b>PPP MTU Setting</b>	1460	MTU (Maximum Transfer Unit) specifies maximum transmission unit size.
<b>TCP MSS Setting</b>	1400	MSS (Maximum Segment Size) specifies maximum segment size.
<b>Connection ID/Name</b>	Empty	Enter the connection ID or connection name. The connection ID/Name can consist of up to 81 alphanumeric characters and is case sensitive.
<b>Connect on Demand and Max Idle Time</b>		
<b>Connect on Demand</b>	Enable	You can configure your HS960 to cut your connection with your ISP after a specified period of time (Max Idle Time). If you have been disconnected due to inactivity, Connect on Demand enables your HS960 to automatically re-establish your connection as soon as you attempt to access the Internet again. If you wish to activate Connect on Demand, click the radio button. If you want your Internet connection to remain, click the radio button of keep alive. The Max Idle Time maximum value is 65535 minutes.
<b>Max Idle Time</b>	10 Minutes	
<b>Keep alive and Redial Period</b>		
<b>Keep alive</b>	Disable	This option keeps your PPTP enabled Internet access connected indefinitely, even when it sits idle. The Redial Period maximum value is 65535 seconds.
<b>Redial Period</b>	30 Seconds	

## 3-2-3 Server

### SERVER

<b>Web Server</b>	<input checked="" type="radio"/> HTTP Port: <input type="text" value="80"/> (80, 8010 - 8060) <input type="radio"/> HTTPS Port: <input type="text" value="443"/> (443, 4430 - 4440) Administrator Idle-Timeout: <input type="text" value="5"/> Min(s) (1 - 1440)
<b>DHCP Server</b>	<input type="radio"/> <b>DHCP Disable</b> <input type="radio"/> <b>DHCP Relay</b> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">         DHCP Server IP Address: <input style="width: 100%;" type="text"/> </div> <input checked="" type="radio"/> <b>DHCP Server</b> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">         IP Pool Starting Address: <input style="width: 100%;" type="text" value="10.59.1.2"/> </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">         Pool Size: <input style="width: 100%;" type="text" value="253"/> (Max.=253)       </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">         Lease Time: <input style="width: 100%;" type="text" value="300"/> (Minutes)       </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">         Primary DNS Server: <input style="width: 100%;" type="text" value="168.95.1.1"/> </div> <div style="border: 1px solid black; padding: 2px;">         Secondary DNS Server: <input style="width: 100%;" type="text"/> </div>
<b>Email Server Redirect</b>	IP Address or Domain Name: <input style="width: 100%;" type="text"/> SMTP Port: <input style="width: 100%;" type="text" value="25"/> (25, 2500 - 2599)
<input type="button" value="Apply"/>	

Figure 3-35 Server Setting Screen

Item	Default	Description
<b>Web Server</b>		
<b>HTTP Port</b>	80	Enter the HTTP port number. The HTTP port allowed range is 80 or 8010 to 8060. For access HS960 system under NAT, please tab the "http://HTTP Port IP Address: Port Number".
<b>HTTPS Port</b>	443	Enter the HTTPS port number. The HTTPS port allowed range is 443 or 4430 to 4440. For access the HS960 system, please tab the "https://HTTPS Port IP Address: Port Number".
<b>Administrator Idle-Timeout</b>	5 Minutes	The idle time out validity range is 1-1440. If the idle time out is set as 5 minutes, it means if the administrator doesn't send a packet in 5 minutes, the administrator will log out automatically.
<b>DHCP Server</b>	Enable	There are three types of DHCP Services.
		DHCP Disable—Disable the DHCP server function.
		DHCP Relay—Enable DHCP Relay function.
		DHCP Server—Enable DHCP server function.
<b>DHCP Relay</b>		To route DHCP through an external server, the administrator needs to enable the DHCP relay and assign a valid DHCP server IP address.
<b>DHCP Server IP Address</b>	Empty	Enter the IP address of DHCP server.
<b>DHCP Server</b>		The HS960 's DHCP server is turned on and running by default when you install it in your network.
<b>DHCP Pool Starting Address</b>	10.59.1.2	Enter the DHCP Pool Starting IP address.
<b>Pool Size</b>	253	The DHCP pool size range is 1 to 512.
<b>Lease Time</b>	300 Minutes	The DHCP lease time. The DHCP lease time range is 1 to 71582788 minutes.
<b>Primary DNS Server</b>	168.95.1.1	Enter the IP address of the network's primary DNS server.
<b>Secondary DNS Server</b>	Empty	Enter the IP address of a second DNS server on the network.
<b>Email Server Redirect</b>		<p>The HS960 provides an extra email server parameter to forward the subscriber's email. The HS960 not only forwards the subscribers' E-mail via other E-mail server but also changes the SMTP header. The recipient of your E-mail sees the message as if you sent it from your local Internet Service Provider.</p> <p><i>Note: Before setting this sever, please make sure the e-mail sever relay function is opened. It must not exceed 50 characters.</i></p>
<b>IP Address or Domain Name</b>	Empty	Enter the E-mail server IP address or domain name.
<b>SMTP Port</b>	25	Enter the SMTP port number for mail server. The SMTP port allowed range is 25 or 2500 to 2599.

## 3-2-4 Authentication

### AUTHENTICATION

<b>Authentication Type</b>	<input checked="" type="radio"/> <b>No Authentication</b> <input type="radio"/> <b>Built-in Authentication</b> <input type="radio"/> <b>User Agreement</b> <ul style="list-style-type: none"> <li><input type="radio"/> Redirect URL Link <input type="text"/> <a href="#">Code</a></li> <li><input checked="" type="radio"/> Standard User Agreement Page</li> </ul> <input type="radio"/> <b>WIFICOM</b> (only for RADIUS authentication) <table border="1" style="width: 100%; margin-top: 5px;"> <tr> <td style="width: 50%;">Redirect Login Page URL:</td> <td><input type="text"/></td> </tr> <tr> <td><input type="checkbox"/> Behind NAT (in case the device is installed behind NAT)</td> <td>NAS IP <input type="text"/></td> </tr> <tr> <td></td> <td>SSL Port <input type="text" value="443"/></td> </tr> <tr> <td></td> <td>Virtual SSL port <input type="text" value="0"/></td> </tr> </table> <input type="radio"/> <b>Wandering Wi-Fi</b> (only for RADIUS authentication) <table border="1" style="width: 100%; margin-top: 5px;"> <tr> <td style="width: 50%;">Redirect Login Page URL:</td> <td><input type="text"/> <a href="#">Code</a></td> </tr> <tr> <td>Policy when Radius Server unreachable</td> <td> <input checked="" type="radio"/> Default deny  <input type="radio"/> Allow access  <input type="radio"/> Deny access               </td> </tr> </table>	Redirect Login Page URL:	<input type="text"/>	<input type="checkbox"/> Behind NAT (in case the device is installed behind NAT)	NAS IP <input type="text"/>		SSL Port <input type="text" value="443"/>		Virtual SSL port <input type="text" value="0"/>	Redirect Login Page URL:	<input type="text"/> <a href="#">Code</a>	Policy when Radius Server unreachable	<input checked="" type="radio"/> Default deny <input type="radio"/> Allow access <input type="radio"/> Deny access
Redirect Login Page URL:	<input type="text"/>												
<input type="checkbox"/> Behind NAT (in case the device is installed behind NAT)	NAS IP <input type="text"/>												
	SSL Port <input type="text" value="443"/>												
	Virtual SSL port <input type="text" value="0"/>												
Redirect Login Page URL:	<input type="text"/> <a href="#">Code</a>												
Policy when Radius Server unreachable	<input checked="" type="radio"/> Default deny <input type="radio"/> Allow access <input type="radio"/> Deny access												
<b>Current User Information Backup</b>	<input type="text" value="1"/> Min(s) (1 - 1440)												
<b>SSL Login Page</b>	<input checked="" type="radio"/> <b>Disable</b> <input type="radio"/> <b>Enable</b>												
<b>User Idle Time Out</b>	<input type="text" value="5"/> Min(s) (1 - 1440) <small>(Not function as *Time to finish* billing mode)</small>												
<input type="button" value="Apply"/>													

Figure 3-36 Authentication Setting Screen

Item	Default	Description
<b>Authentication Type</b>	No Authentication	<p>Option: No Authentication, Built-in Authentication or User Agreement.</p> <p><b>No Authentication</b> Subscriber can directly access the Internet without entering a username and password.</p> <p><b>Built-in Authentication</b> The HS960 provides "Built-in Authentication". This feature involves the HS960 generating the subscriber account and authenticating the subscriber login according to the generated account.</p> <p><b>User Agreement</b> The end subscriber must accept the service usage agreement before they can access the Internet.</p> <p><b>WIFICOM</b> The HS960 provides Authentication for WIFICOM. This feature allows the HS960 to be managed via an external RADIUS server.</p> <p><b>Wandering Wi-Fi</b> The HS960 provides Authentication for Wandering Wi-Fi. This feature allows the HS960 to be managed via an external RADIUS server.</p>
<b>Current User Information Backup</b>	1 Min(s)	The system provides automatic backup account information and unused account to flash ROM. This function allows administrators to adjust the backup time. The default value is 1 minute. The Current User Information Backup valid range is 1 to 1440.
<b>Redirect Login Page URL</b>	Empty	The input format can be http://www.yahoo.com. The maximum character of the URL Link is 200.

Copy and paste the following HTML Code into your home page to produce user agreement login page.

**Redirect Page Sample Code**

```

<html>
<body>
<center>
<table width="100%" border="0">
<tr>
<td align="right" width="45%">
<form method="post" action="http://1.1.1.1/agree.cgi" name="agree">
<input type="submit" name="agree" value="Agree">
</form>
</td>
<td width="10%">&nbsp;&nbsp;&nbsp;</td>
<td width="45%">
<form method="post" action="http://1.1.1.1/disagree.cgi" name="disagree">
<input type="submit" name="disagree" value="Do not agree">
</form>
</td>
</tr>
</table>
</center>
</body>
</html>

```

Figure 3-37 Preview Redirect Login Page Code

Item	Default	Description
<b>SSL Login Page</b>	Disable	Enables or disables SSL security of login page.
<b>User Idle Time Out</b>	5 Minutes	The user idle time out valid range is 1-1440.

## 3-2-5 RADIUS Authentication

**RADIUS**

Disable  
 Enable

**Time to finish**  
 The subscriber can access Internet only one time with one account. Once subscriber login, the pre-defined usage time will start until run out even the subscriber stop to access the Internet before run out.

**Accumulation**  
 The subscriber can access Internet several times with one account. The system can keep and accumulate every single usage time until the pre-defined usage time run out.

<b>Primary RADIUS Server</b>	Sender IP address	<input type="text"/>
	Authentication Port	<input type="text" value="1812"/>
	Accounting Port	<input type="text" value="1813"/>
	Shared Secret Key	<input type="text"/>

<b>Secondary RADIUS Server</b>	Sender IP address	<input type="text"/>
	Authentication Port	<input type="text" value="1812"/>
	Accounting Port	<input type="text" value="1813"/>
	Shared Secret Key	<input type="text"/>

Retry times when Primary fail

Retry Frequency  seconds(3-75)

**Accounting Service**  Disable  Enable  
 Interval Update Time  min(s)

**Authentication Method**

---

**WSPPr Smart Client**

Enable

**Login Mode**  Directly Reply  
 Proxy Reply with "Redirect Login Page" URL  
 Proxy Reply with Specific URL

Figure 3-38 Authentication Setting Screen



Item	Default	Description
<b>RADIUS Authentication</b>	Disable	Option: No Authentication or RADIUS Server.
		<p><b>Disable (No Authentication)</b> A subscriber can directly access the Internet without entering a username and password.</p> <p><b>Enable (RADIUS Authentication)</b> The HS960 provides "RADIUS Authentication" to build up an Internet service with a RADIUS server. If RADIUS Authentication is enabled, all subscribers' authentication will send to the RADIUS Server by RADIUS protocol (RFC 2865, 2866).</p>
<b>Time to Finish/ Accumulation</b>	Enable	Provides two different accounting calculations for the Internet service.
<b>Primary RADIUS Server</b>		
<b>Server IP</b>	Empty	Enter the IP address of RADIUS server.
<b>Authentication Port</b>	1812	Enter the authentication port number. The authentication port number must match with the RADIUS server setting. The allowed numbers are from 0 to 65535.
<b>Accounting Port</b>	1813	Enter the accounting port number. The accounting port number must match with the RADIUS server setting. The allowed numbers are from 0 to 65535.
<b>Share Secret Key</b>	Empty	The key number also has to match with the Server setting. Up to 64 characters are allowed.
<b>Secondary RADIUS Server</b>		
<b>Server IP</b>	Empty	Enter the IP address of RADIUS server.
<b>Authentication Port</b>	1812	Enter the authentication port number. The authentication port number must match with the secondary RADIUS server setting. The allowed numbers are from 0 to 65535.
<b>Accounting Port</b>	1813	Enter the accounting port number. The accounting port number must match with the secondary RADIUS server setting. The allowed numbers are from 0 to 65535.
<b>Share Secret Key</b>	Empty	The share secret key, the key number also has to match with the secondary RADIUS Server setting. Up to 64 characters are allowed.
<b>Retry times when Primary fail</b>	1	Specify the retry times when primary fail.
<b>Retry Frequency ~ Seconds</b>	3	The field default value is 3 seconds.
<b>Accounting Service</b>	Enable	Enables or disables the accounting service.
<b>Interim Update Time</b>	5 Minutes	Specify the interim update time.
<b>Authentication Method</b>	CHAP	Enter the authentication method of RADIUS server.
<b>WISPr Smart Client</b>		
<b>Enable</b>	Disable	Enables or disables WISPr Smart Client roaming function.
<b>Login Mode</b>	Directly Reply	Options: Directly Reply, Proxy Reply with "Redirect Login Page" URL and Proxy Reply with Specific URL. The login mode information for the IPASS GIS connection. (Provided by your ISP).

## 3-2-6 Billing

This function is used to setup a billing profile. A billing profile is a description of how you want to charge your customer.

**BILLING**

**Pre-Paid**  
The subscribers can access Internet with pre-defined usage time.

**Enable Credit Card Service**

**Time to Finish**  
The subscriber can access Internet only one time with one account. Once subscriber login, the pre-defined usage time will start until run out even the subscriber stop to access the Internet before run out.

**Accumulation**  
The subscriber can access Internet several times with one account. The system can keep and accumulate every single usage time until the pre-defined usage time run out.

**Post-Paid (Only for keypad application)**  
The subscribers can access Internet without pre-defined usage time. This can be operated with an optional external PS/2 keypad which is connected with acoustic printer. The printed will only show the username/password. An account can also be terminated with the optional keypad.

**Billing Profile**

Currency: \$ (Number of decimal places: 2)

Tax Percentage: %

No.	Active	Name (max: 10 characters)	Account Usage Time	Charge
01	<input checked="" type="checkbox"/>	30 minutes	30 minutes	1.00
02	<input checked="" type="checkbox"/>	1 hour	1 hours	2.00
03	<input checked="" type="checkbox"/>	2 hours	2 hours	3.00
04	<input type="checkbox"/>	3 hours	3 hours	4.00
05	<input type="checkbox"/>	5 hours	5 hours	5.00
06	<input type="checkbox"/>	10 hours	10 hours	5.00
07	<input type="checkbox"/>	1 day	1 days	10.00
08	<input type="checkbox"/>	2 days	2 days	20.00
09	<input type="checkbox"/>	7 days	7 days	50.00
10	<input type="checkbox"/>	30 days	30 days	200.00

Figure 3-39 Billing Setting Screen

Item	Default	Description
Pre-Paid	Enable	The subscribers can access Internet with pre-defined usage time.

If you change the billing mode (Pre-paid > Post-paid or Post-paid > Pre-paid), the system will erase all account and disconnect all on-line users.



Figure 3-40 Message Box

Item	Default	Description
Enable Credit Card Service	Disable	Enables or disables the credit card service. Before you enable the credit card service, you must ensure that your credit service is configured (an external provider is required) and the currency is Australian dollars.

**CREDIT CARD**

**A Authorize.net**

Version: 3.1

Merchant ID:

Merchant Password:  None Password:

Merchant Transaction Key:

Payment Gateway:

Merchant Name:  (max. 40 characters)

Email Additional Information  Username and Password  Usage Time

**N Authorize.net**

Merchant ID:

Terminal ID:

Secure Server Address:

**S Secure Pay**

Merchant ID:  (max. 7 characters)

SecurePay Address:

Credit Card logos to be displayed on the login page:

VISA  MasterCard  American Express  Discover  NetComm (Australia)  Bank Card

Figure 3-41 Credit Service Setting Screen

Item	Default	Description
Service	Time to Finish	Time to Finish

The subscriber can access Internet only once time with one account. Once the subscriber has logged in, the pre-defined usage time will start and will run until the time runs out, even if the subscriber logs out and is not active, once activated the time expires after the physical time elapses.

## Accumulation

The subscriber can access the Internet multiple times and on multiple occasions with the one account. The system will accumulate every individual usage times, until the pre-defined usage time runs out.

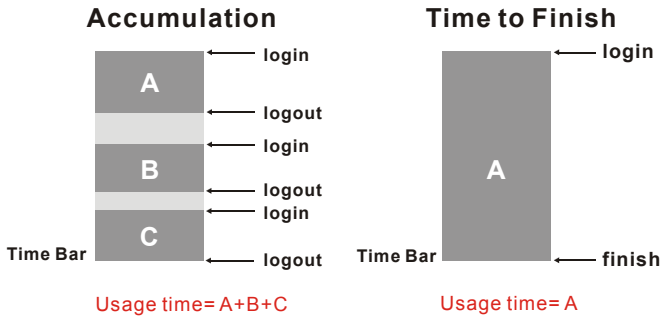


Figure 3-42 Accumulation and Time to Finish

Item	Default	Description
<b>Billing Profile</b>		
Currency	\$	Enter the appropriate currency unit or currency symbol.
Number of decimal places	2	Enter the number. The field maximum value is 3.
Tax Percentage	Disable	This check box is used to indicate the taxable status of the account.
	10%	Enter the tax rate (i.e. a 10% sales tax is entered as 10).
Item	Default	Description
No.	+1~+10	The index number of billing profile. In Advanced setup, we provide 10 billing profiles.
Active	-	Click on check box, active or inactive the billing profile.
Name	-	It is the name of billing profile. The maximum allowed characters length is 12.
Account Usage time	-	The duration of the billing period. When this period expires, user account will be discontinued.
Charge	-	Enter the unit rate amount (i.e. 35.00) that most of your accounts are charged for one day of service.



Figure 3-43 Pre-paid Procedure Diagram

## 3-2-7 Accounting

This function allows the service provider to generate subscriber accounts.

### ACCOUNTING

Expiration	Un-used account will be deleted after <input type="text" value="12"/> hours <input type="button" value="↓"/> automatically. (1-30) Accumulation account will be deleted after logged in <input type="text" value="3"/> months <input type="button" value="↓"/> (1-30)
Printout	Number of copies to print: <input type="text" value="1"/> <input type="button" value="↓"/>
Replenish	<input type="checkbox"/> Can be replenished by subscriber

<b>Three-Button Printer / Web-based Account Generator Panel</b>		<input type="button" value="Preview / Operate"/>
Button A	<input type="text" value="(01) 30 minutes, 30 minutes, \$1.00"/> <input type="button" value="↓"/>	
Button B	<input type="text" value="(02) 1 hour, 1 hours, \$2.00"/> <input type="button" value="↓"/>	
Button C	<input type="text" value="(03) 2 hours, 2 hours, \$3.00"/> <input type="button" value="↓"/>	
Print to ...	<input checked="" type="radio"/> Account Generator Printer <input type="button" value="Q"/> <input type="radio"/> PC-Connected Printer <input type="button" value="Q"/>	
Use	<input type="text" value="Button A"/> for Discount Price Plan based on "Button Presses": <input type="text" value="Disable"/> <small>(Only valid for Three-Button Printer)</small>	

<b>Discount Price Plan based on "Button Presses"</b> <input checked="" type="checkbox"/> Charge by levels			
Level	Conditions	Button Presses	Unit Price
1	when > =	1	same as base charge
2	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
3	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
4	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
5	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
6	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
7	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
8	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
9	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
10	when > =	<input type="text" value="0"/>	<input type="text" value=""/>

Figure 3-44 Accounting Setting Screen

Expiration	Un-used account will be deleted after <input type="text" value="12"/> hours <input type="button" value="↓"/> automatically. (1-30) Accumulation account will be deleted after logged in <input type="text" value="3"/> months <input type="button" value="↓"/> (1-30)
Printout	Number of copies to print: <input type="text" value="1"/> <input type="button" value="↓"/>
Replenish	<input type="checkbox"/> Can be replenished by subscriber

Figure 3-45 Account Expiration Setting Screen

Item	Default	Description
<b>Expiration</b>		
Un-used account will be deleted after ~hours automatically	12 hours	Enter the number of hours/minutes/days. The field maximum value is 30 hours/minutes/days.
Accumulation account will be deleted after logged in ~	3 months	Enter the number and select time unit from list box. The field maximum value is 30 month/ days/ hours.
<b>Printout</b>		
Number of copies to print	1	The system allows you to print all your bills. Select one number of copies by clicking in the list box.
Can be replenished by subscriber	Enable	Click the check box to enable the replenish function.

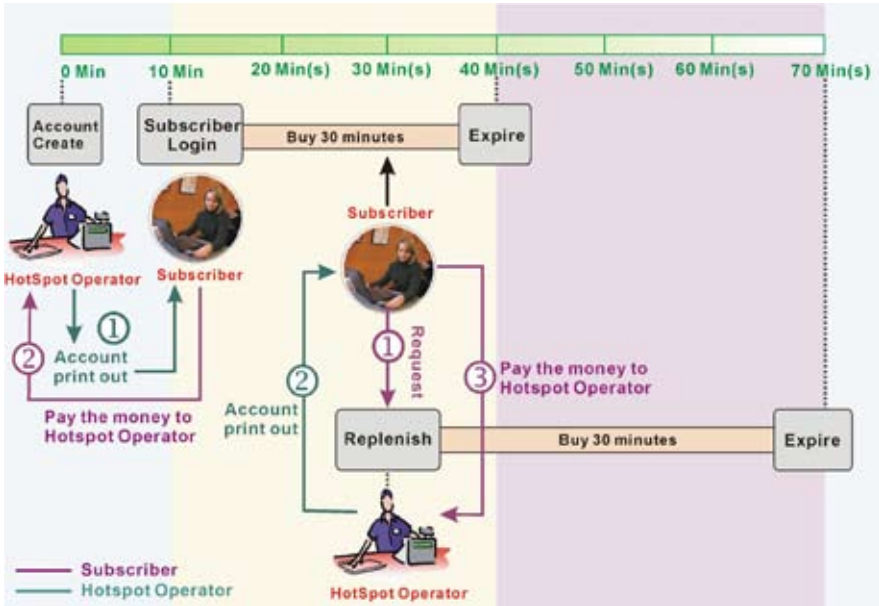


Figure 3-46 Account Process Diagram

## Three-Button Printer/ Web-based Account Generator Panel

Three-Button Printer / Web-based Account Generator Panel Preview / Operate

Button A: (01) 30 minutes, 30 minutes, \$1.00

Button B: (02) 1 hour, 1 hours, \$2.00

Button C: (03) 2 hours, 2 hours, \$3.00

Print to...  Account Generator Printer  PC-Connected Printer

Use  for Discount Price Plan based on "Button Presses":  (only valid for Three-Button Printer)

Figure 3-47 Three-Button Printer/ Web-based Account Generator Panel Setting Screen

Item	Default	Description
Button A~C	-	Defines each button's billing profile. Select one billing profile by clicking in the list box.
Print to...	Account Generator Printer	Select a printer to print out your account.
Use ~ for Discount Price Plan based on "Button Presses"	Button A, Disable	Select one button (A~C) by clicking in the list box to assign the base charge and select enable to activate the discount price plan.

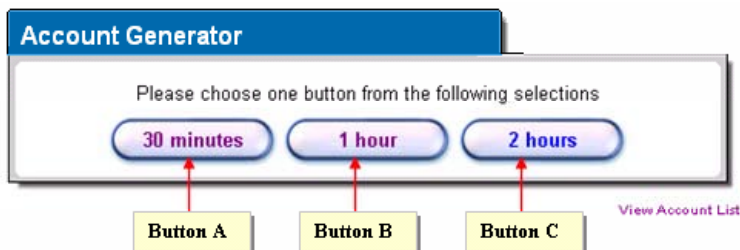


Figure 3-48 Account Generator Panel

Welcome!	
<b>Hotspot Internet Service</b>	
Username:	3m5k5r25
Password:	7uezza89
Billing:	Time to Finish
Service:	30 minutes
Unit:	1
Usage Time:	0:30:00
<b>Total</b>	<b>\$1.00</b>
ESSID: Wireless	

S/N:000006 2004/11/26 15:57:25

Please activate your account before 2004/11/27 03:57:25

**Thank you very much !**

Figure 3-49 PC-connected Printer Printout (Time to Finish)

Expiration	Un-used account will be deleted after <input type="text" value="12"/> hours automatically Accumulation account will be deleted after logged in <input type="text" value="3"/> <input type="text" value="seconds"/>
Printout	Number of copies to print : <input type="text" value="1"/>
Replenish	<input type="checkbox"/> Can be replenished by subscriber

Welcome!

-----

Hotspot Internet Service

-----

Username:xxxxxxxx

Password:xxxxxxxx

Billing: Accumulation

Service: 30 minutes

Unit: 1

Usage Time: 0:30:00

Total \$1.00

-----

ESSID: Wireless

Wireless: Disable

-----

2004/7/15 09:27:50  
S/N:000001

Please start your account before  
2004/7/15 21:27:50

Please finish your usage time within 3 months  
after your first login

Thank you very much !

Figure 3-50 Web-based Account Generator Printout (Accumulation)



## Multiple Button entries.

The device allows for the buttons on the printer to be pressed multiple times to increase the time purchased. Should button B be pressed multiple times it will multiply the time purchased by the pricing structure in button B.



Figure 3-51 Example 1

Button B is pressed seven times:  $7 \times \$2.00 = \$14.00$



Figure 3-52 Account Printout

## Discount Price Plan based on “Button Presses” is enabled.

- This feature allows you to discount the time based on multiple button presses, or to offer increased time for selected customers.

[Preview / Update](#)

Button A	(01) 30 minutes, 30 minutes, \$1.00
Button B	(02) 1 hour, 1 hours, \$2.00
Button C	(03) 2 hours, 2 hours, \$3.00

Print to...  Account Generator Printer  PC-Connected Printer

Use  for Discount Price Plan based on "Button Presses":  (only valid for Three-Button Presses)

---

Discount Price Plan based on "Button Presses"  Charge by levels

Level	Conditions	Button Presses	Unit Price
1	when > =	1	same as base charge
2	when > =	<input type="text" value="3"/>	<input type="text" value="1.5"/>
3	when > =	<input type="text" value="7"/>	<input type="text" value="1"/>
4	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
5	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
6	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
7	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
8	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
9	when > =	<input type="text" value="0"/>	<input type="text" value=""/>
10	when > =	<input type="text" value="0"/>	<input type="text" value=""/>

Figure 3-53 Example 2

Button B is pressed 7 times, however setting will allow 7 amounts of time for a different amount of pricing than the standard button base price. : Amount:  $7 \times \$ 1 = \$ 7.00$

Below is an example of the account printout.

Welcome!

---

Hotspot Internet Service

---

Username: 2ds5ke24  
 Password: 8e3zte33  
 Billing: Time to Finish  
 Service: 1 hour  
 Unit: 7  
 Usage Time: 07:00:00  
 Total: \$7.00

---

ESSID: Wireless

2004/11/29 10:45:14  
 S/N:000012  
 Please activate your  
 account before  
 2004/11/29 22:45:14

---

Thank you very much!

Figure 3-54 Account Printout

## Discount Price Plan based on “Button Presses” and Charge by level is enabled.

- This allows for button combinations to be pressed to add different units of time together to get one account and receipt for the subscriber.

Preview / Operate

Button A: [01] 30 minutes, 30 minutes, \$1.00

Button B: [02] 1 hour, 1 hours, \$2.00

Button C: [03] 2 hours, 2 hours, \$3.00

Print to...  Account Generator Printer  PC-Connected Printer

Use [Button B] for Discount Price Plan based on "Button Presses": [Enable] (only valid for Three-Button Printer)

---

Change by levels

Level	Conditions	Button Presses	Unit Price
1	when > =	1	same as base charge
2	when > =	3	1.5
3	when > =	7	1
4	when > =	0	
5	when > =	0	
6	when > =	0	
7	when > =	0	
8	when > =	0	
9	when > =	0	
10	when > =	0	

Figure 3-55 Example 3

Amount:  $2 \times \$2.00 + 4 \times \$1.50 + 1 \times \$1 = \$11.00$

Welcome!

---

Hotspot Internet Service

---

Username: v6w3xd48  
 Password: ir39mg84  
 Billing: Time to Finish  
 Service: 1 hour  
 Unit: 7  
 Usage Time: 07:00:00  
 Total: \$11.00

---

ESSID: Wireless

2004/11/29 10:43:48  
 S/N:000013  
 Please activate your  
 account before  
 2004/11/29 22:43:48

---

Thank you very much!

Figure 3-56 Account Printout

## Discount Price Plan based on "Button Presses"

Discount Price Plan based on "Button Presses" <input checked="" type="checkbox"/> Charge by levels			
Level	Conditions	Button Presses	Unit Price
1	when > =	1	same as base charge
2	when > =	<input type="text" value="0"/>	<input type="text"/>
3	when > =	<input type="text" value="0"/>	<input type="text"/>
4	when > =	<input type="text" value="0"/>	<input type="text"/>
5	when > =	<input type="text" value="0"/>	<input type="text"/>
6	when > =	<input type="text" value="0"/>	<input type="text"/>
7	when > =	<input type="text" value="0"/>	<input type="text"/>
8	when > =	<input type="text" value="0"/>	<input type="text"/>
9	when > =	<input type="text" value="0"/>	<input type="text"/>
10	when > =	<input type="text" value="0"/>	<input type="text"/>

Figure 3-57 Discount Price Plan Setting Screen

Item	Default	Description
Charge by levels	Enable	Enables or disables the charge by levels function.
Level	1~10	This field displays the level number of charge rate.
Conditions	When>=	The discount condition.
Button Presses	-	Enter the times of pressing button.
Unit Price	-	Enter the amount of charge level.

## 3-2-8 Credit Card

The HS960 provides three credit card services (Authorize.net, iValidate.net and Secure Pay) that allow service provider to authorise, process, and manage credit transactions directly from Internet. Secure Pay is the Australia Credit Card Gateway, see [www.securepay.com.au](http://www.securepay.com.au) for details.

**CREDIT CARD**

**Authorize.net**

Version: 3.1

Merchant ID: [ ]

Merchant Password:  Need Password [ ]

Merchant Transaction Key: [ ]

Payment Gateway: <https://secure.authorize.net/gateway/transact.dll>

Enrol/Additional Information

Merchant Name: [ ] (max. 40 characters)

Username and Password

Usage Time

**iValidate.net**

Merchant ID: [ ]

Terminal ID: [ ]

Secure Server Address: <https://www.vivox.net/merchant/process.asp>

**Secure Pay**

Merchant ID: [ ] (max. 7 characters)

SecurePay Address: <https://www.securepay.com.au/securepay/payments/psrcs>

Credit Card icons to be displayed on the login page

VISA  MasterCard  American Express  Discover  BankCard

**Apply**

Figure 3-58 Credit Card Setting Screen

Item	Default	Description
<b>Authorize.net</b>		
Version	3.1	This field displays the merchant version.
Merchant ID	Empty	Enter your Merchant ID. This is a Merchant Identification Number that you will receive from your Merchant Provider (Secure Pay), the maximum characters for the Merchant ID is 50.
Merchant Password	This is a Merchant password that you will receive from your Merchant Provider.	
<b>Secure Pay</b>		
Merchant ID	Empty	Enter your Merchant ID. This is a Merchant Identification Number that you've received from your Merchant Provider. The maximum character of the Merchant ID is 7.
SecurePay Address	<a href="https://www.securepay.com.au/securepay/payments/process2.asp">https://www.securepay.com.au/securepay/payments/process2.asp</a>	Enter the address of SecurePay Payment Gateway.
Credit Card icons to be displayed on the login page	VISA	Click on check box to display credit card icon on the login page.

Please follow steps below to pay using credit card.

- 1 Choose Credit Card service on the login page.

**Welcome**

**Hot Spot Internet Service**

Username:

Password:

Enter Cancel **Select Credit Card Service**

**or Click here to pay by credit card** **Click**

**VISA** **Click**

Figure 3-59 Login Page

- 2 Select Service and enter payment information.

**Welcome**

**Hot Spot Internet Service** **Currency - Australian Dollars**

**Please choose from the following service selection**

Service Code	Service Name	Usage Time	Charge
1	30 minutes	30 minutes	1.00
2	1 hour	1 hours	2.00
3	2 hours	2 hours	3.00

How many units of internet access would you like to purchase?

\*Please kindly note that there will be no refund once connectivity is confirmed.  
\*Please note that the time block of selected service is based on continuous usage.

**Enter Payment Information (all info is required)** (all info is required)

Credit card number:

Credit card expiration date:  (MMYY)

Enter Email Address:

First Name:

Last Name:

Address:

City:

State/Province:

ZIP/Postal Code:

Country:

Phone:

**Submit Transaction and Login**

Figure 3-60 Service & Payment Information Setting Screen (Securepay)

- 3 After valid payment information has been provided, the subscriber will obtain one valid account to login or the Figure 3-61 screen will appear.

**Welcome**

---

**Hot Spot Internet Service**

---

**You may now use the Internet !**

**IMPORTANT! Make a note of your username and password for logging in later. This will be your only opportunity to do so. Note upper and lowercase letters.**

**This is your account information, please keep this for your Internet Service.**

**Your username is u92tf237**

**Your password is vk544d77**

**Your usage time is 00:30:00**

**Please activate your account before 2004/08/10 10:30:28**

---

*Figure 3-61 User Account Information*

## 3-2-9 Customization

### Login Page

The HS960 provides three different login page formats, including standard, redirect, advanced and frame format.

#### Standard

For some service providers, they may hope to have a customize subscriber's login page to the users. This function helps them to realize the ideal. The page elements are including login page title, background color, subtitle etc.

#### CUSTOMIZATION

Login Page	Logo	Information Window	Account Pinpoint	Credit Card	User Agreement Page
Please choose from the following login page types:					
<input checked="" type="radio"/> <b>Standard</b>					
Please enter the customizable message on the <b>standard</b> login page					
<input type="checkbox"/> Logo					
Title	<input type="text" value="Welcome"/> (Max: 60 characters)				
Subtitle	<input type="text" value="Hot Spot Internet Service"/> (Max: 60 characters)				
Username	<input type="text" value="Username"/> (Max: 20 characters)				
Password	<input type="text" value="Password"/> (Max: 20 characters)				
Enter Button	<input type="text" value="Enter"/> (Max: 20 characters)				
Cancel Button	<input type="text" value="Cancel"/> (Max: 20 characters)				
<input type="checkbox"/> Footnote	<input type="text" value="Please contact us if you have any question"/> (Max: 240 characters)				
<input checked="" type="checkbox"/> Copyright	<input type="text" value="Copyright (c) 2004-2015 All Rights Reserved"/> (Max: 60 characters)				
Background Color	<input type="text" value="FFFFFF"/> <a href="#">View Color Grid</a>				
 <a href="#">Standard Login Page Preview</a>					

Figure 3-62 Standard Login Page Customization Setting Screen



Item	Default	Description
Logo	Disable	Select the check box to display service provider's logo.
Title	Welcome	Enter the title name of subscriber login page. The maximum allowed characters length is 80.
Subtitle	Hot Spot Internet Service	Enter the subtitle name of subscriber login page. The maximum allowed characters length is 80.
Footnote	Disable	Allow the administrator to input the footnote such like "Pleas Contact to our Customer Service Center, EXT 141". The maximum character of the footnote is 240.
Item	Default	Description
Copyright	Enable	The copyright is allowed the administrator to input a paragraph in the subscriber login page for copyright information. The maximum character of the copyright is 80.
Background Color	FFFFFF	The background text color can be specified color. For the specified text color format please views the color grid. The allowed format is Hexadecimal.



Figure 3-63 Login Page Screen

## Redirect

This allow service provider to redirect the subscriber's browser to a specified home page.

<b>Redirect</b>	Redirect Login Page URL: <input type="text"/>	<a href="#">Code</a>
-----------------	---	----------------------

Figure 3-64 Redirect Login Page Setting Screen

Copy and paste the following HTML Code into your home page to produce redirect subscriber login page.

**Redirect Login Page Code**

```

<html>
<body style="font-family: Arial" bgcolor="#FFFFFF">
<form method="post" action="http://1.1.1.1/login.cgi" name="apply">
<div align="center">
<table cellpadding="0" border="1" bordercolor="black" bordercolorlight="black" border="1">
<tr>
<td align="center" width="100%" bgcolor="#f0f0f0" colspan="2">
<font size="2"><b>Welcome</b></font>
<td>
<tr>
<td align="right" width="35%" bgcolor="#e0e0e0">
<font color="black" size="2"><b>Username:</b></font>
<td align="left" width="65%">
<input type="text" name="username" size="25">
<tr>
<td align="right" width="35%" bgcolor="#e0e0e0">
<font color="black" size="2"><b>Password:</b></font>
<td align="left" width="65%">
<input type="password" name="password" size="25">
<tr>
<td align="center" width="100%" colspan="2">
<input type="submit" name="apply" value="Enter" style="font-family: Arial">
<input type="reset" name="clear" value="Clear" style="font-family: Arial">
<td>
<tr>
<td>
</table>
</div>
</body>
</html>

```

Figure 3-65 Redirect Login Page Code Screen

## Advanced

This function allows the user to design the login page of the HS960.

Figure 3-66 Advanced Login Page Setting Screen

Item	Default	Description
Welcome Slogan	Welcome	The maximum character allowance is 80.
Page Background	None	The page background can be none or specified color. For the background color format please views the color grid. The allowed format is Hexadecimal.
Article	Empty	The article is allows the administrator to input a paragraph in the subscriber login page for advisements or announcements. The maximum character allowance is 1024.
Article Text Color	000000	The article text color can be a specified color. For the specified text color format please views the color grid. The allowed format is Hexadecimal.
Article Background Color	None	The article background can be a specified color. For the background color format please views the color grid. The allowed format is Hexadecimal.
Information	Empty	Allows the administrator to input text information such as address, telephone number and fax information. The maximum character allowance is 80.
Comments	Empty	Allows the administrator to input the text comments such as "Please contact our Customer Service Center, EXT 141". The maximum character allowance is 80.

Browser Set Background Colors by RGB

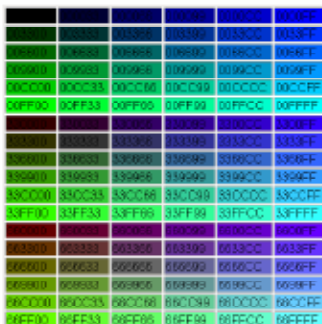


Figure 3-67 Color Grid

## Frame

If “Frame” is selected the subscriber login page will be separated into a Top Frame and a Bottom Frame. The Bottom Frame is a default format for username and password input, the Top Frame can be a specified URL to link.

www.caesarpark.com

SCENE	Top Frame	URL: <input type="text" value="http://www.caesarpark.com"/>
	Bottom Frame	This frame will show the standard login page

Figure 3-68 Frame Login Page Setting Screen

Item	Default	Description
Top Frame URL Link	Empty	The input format can be http://www.yahoo.com. The maximum character of the URL Link is 200.
Bottom Frame	-	This frame will show the standard login page.



Figure 3-69 Example-Login Page Screen

## Logo

This function allows for the uploading of a logo image file which can be shown on the standard login page and account printout of PC-connected printer.

**CUSTOMIZATION**

Login Page	<b>Logo</b>	Information Window	Account Printout	Credit Card	User Agreement Page
------------	-------------	--------------------	------------------	-------------	---------------------

This function allows to upload the customer's logo image file which can be shown on the standard login page and account printout of PC-connected printer.

File Path:

Maximum file size is 60 kbytes and recommended dimension is about 200x50 pixels

No logo file.

Figure 3-70 Logo Setting Screen

## Information Window

This function allows for “Information Window” pop-ups on a subscribers PC once they have been connected to the HS960. These pop ups include counting down remaining time and also request replenishment once time has expired.

### CUSTOMIZATION

Login Page	Logo	Information Window	Account Printout	Credit Card	User Agreement Page
Information window is a pop-up window that is presented to subscribers with their browser once after subscriber login successfully. The subscriber can type <a href="http://1.1.1.1/info">http://1.1.1.1/info</a> to open this window again.					
<input checked="" type="checkbox"/> Display Information Window once after a subscriber logs in successfully					
Information Window Type		<input type="radio"/> Redirect <input checked="" type="radio"/> Pop up <input checked="" type="checkbox"/> Allow to close the pop up window			
<b>Information Window Contents</b>					
Window Name	Information Window (Max: 30 characters)				
Main message	You can use Internet now! (Max: 30 characters)				
Message Description	This is an information window to show (Max: 100 characters)				
Time count label	Standard for pre-defined usage time				
	Remaining Usage (Max: 30 characters)				
	Post-Paid Billing (Max: 30 characters)				
<input type="checkbox"/> Warning/Alarm message	If you don't want to continue using In (Max: 100 characters)				
	Notice Text 1 (Max: 100 characters)				
<input type="checkbox"/> Notice Message	Notice Text 2 (Max: 100 characters)				
	Notice Text 3 (Max: 100 characters)				
					Preview
<input type="button" value="Apply"/>					

Figure 3-71 Example-Login Page Screen



Figure 3-72 Example-Login Page Screen



Figure 3-73 Information Window

Billing Type=Time to Finish



Figure 3-74 Information Window

Super Subscriber Account (Default username="super" & password="super")

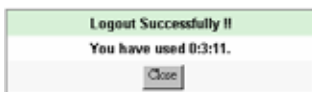


Figure 3-75 Logout Successfully Dialog Box

Billing Type=Accumulation



Figure 3-76 Alarm Dialog Box1

## Account Printout

This function allows a service provider to specify the text on the account printout.

### CUSTOMIZATION

Login Page	Logo	Information Window	Account Printout	Credit Card	User Agreement Page
<input type="checkbox"/>	Logo	* Only for PC-connected printer			
	Title:	Welcome! (Max=75)			
	Subtitle:	Hotspot Internet Service (Max=80)			
	Username:	Username (Max=24)			
	Password:	Password (Max=24)			
<input checked="" type="checkbox"/>	Billing Method:	Time To Finish	Billing: Time to Finish (Max=24)		
		Accumulation:	Billing: Accumulation (Max=24)		
<input checked="" type="checkbox"/>	Billing Profile:	Service (Max=24)			
<input checked="" type="checkbox"/>	Purchase Unit:	Unit (Max=24)			
	Usage Time:	Usage Time (Max=24)			
<input checked="" type="checkbox"/>	Price:	Total (Max=24)			
	Tax:	Tax (Max=24)	TOTAL: Grand Total (Max=24)		
<input checked="" type="checkbox"/>	ESSID:	ESSID (Max=24)			
	Wireless Security	WPA: WPA (Max=24)			
		WEP: WEP (Max=24)			
<input type="checkbox"/>	Additional Label 1:	(Max=24) Value (Max=24)			
<input type="checkbox"/>	Additional Label 2:	(Max=24) Value (Max=24)			
<input checked="" type="checkbox"/>	Print out Time:	Format: yyyy/mm/dd	HH:mm:ss (00:24:00-23:59:59)		
<input checked="" type="checkbox"/>	Expiration Time:	Description: Please activate your account before (Max=24)	Format: yyyy/mm/dd	HH:mm:ss (00:24:00-23:59:59)	
		Accumulation: Please finish your usage time within 3 months after your first login (Max=24)			
<input checked="" type="checkbox"/>	Ending:	Thank you very much! (Max=24x10)			
	Preview of PC-connected printer				
	Preview of account generator printer				
	Preview of Post-Paid Printout				

Figure 3-77 Account Printout Customisation Setting Screen



Welcome!	
<b>Hotspot Internet Service</b>	
<b>Username:</b>	xxxxxxxx
<b>Password:</b>	xxxxxxxx
<b>Billing:</b>	Time to Finish
<b>Service:</b>	30 minutes
<b>Unit:</b>	1
<b>Usage Time:</b>	0:30:00
<b>Total</b>	<b>\$1.00</b>
<b>ESSID:</b>	Wireless
S/N:000001	2004/11/29 14:32:58
Please activate your account before 2004/11/30 02:32:58	
<b>Thank you very much !</b>	
<input type="button" value="Close"/>	<input type="button" value="Print"/>

Figure 3-78 PC-connected Printer Printout

Welcome!
-----
Hotspot Internet Service
-----
Username:xxxxxxxx
Password:xxxxxxxx
Billing: Time to Finish
Service: 30 minutes
Unit: 1
Usage Time: 0:30:00
Total \$1.00
-----
ESSID: Wireless
-----
2004/11/29 14:35:27
S/N:000001
Please activate your account before
2004/11/30 02:35:27
Thank you very much !
<input type="button" value="Close"/>
<input type="button" value="Print"/>

Figure 3-79 Account Generator Printer Printout

## Credit Card

### Standard Login Page

This function allows a service provider to customise the additional credit card message on the standard login page.

Standard Login Page	Customize the additional credit card message for the standard login page			
	<table border="1"><tr><td>Credit Card Message</td><td><input type="text" value="or Click here to pay by credit card"/></td></tr><tr><td></td><td><small>(Maximum 80 characters)</small></td></tr></table> <p style="text-align: right;"><a href="#">Preview of Standard Login Page</a></p>	Credit Card Message	<input type="text" value="or Click here to pay by credit card"/>	
Credit Card Message	<input type="text" value="or Click here to pay by credit card"/>			
	<small>(Maximum 80 characters)</small>			

Figure 3-80 Credit Customization Setting Screen

**Welcome**

**Hot Spot Internet Service**

---

Username:	<input type="text"/>
Password:	<input type="password"/>

---

[or Click here to pay by credit card](#)



Please contact us if you have any question

Figure 3-81 Standard Login Page

## Service Selection Page

This function allows the service provider to customise the additional credit card message for the standard login page.

Service Selection Page	Customize the message for the service selection page
Service Selection Message	<input type="text" value="Please choose from the following service selection"/> <small>(Max. 50 characters)</small>
Purchase Unit Message	<input type="text" value="How many units of Internet access would you like to"/> <small>(Max. 50 characters)</small>
Notification Message 1	<input type="text" value="Please kindly note that there will be no refund once"/> <small>(Max. 150 characters)</small>
Notification Message 2	<input type="text" value="Please note that the time block of selected service"/> <small>(Max. 150 characters)</small>
Notification Message 3	<input type="text"/> <small>(Max. 150 characters)</small>
Enter Payment Information	<input type="text" value="Enter Payment Information (all info is required)"/> <small>(Max. 100 characters)</small>
Enter Credit Card Number	<input type="text" value="Credit card number:"/> <small>(Max. 50 characters)</small>
Enter Credit Card expiration date	<input type="text" value="Credit card expiration date:"/> <small>(Max. 50 characters)</small>
<input type="checkbox"/> Card Verification Value	<input type="text" value="Credit Card Code"/> <small>(Max. 40 characters)</small>
Enter Email Address	<input type="text" value="Enter Email Address"/> <small>(Max. 50 characters)</small>
Submit Button	<input type="text" value="Submit Transaction and Login"/> <small>(Max. 40 characters)</small>


 [Preview of Service Selection Page](#)

Figure 3-82 Service Selection Page Setting Screen (Secure Pay)

**Welcome**

**Hot Spot Internet Service**

---

**Please choose from the following service selection**

	Service Code	Service Name	Usage Time	Charge
<input checked="" type="radio"/>	1	30 minutes	30 minutes	1.00
<input type="radio"/>	2	1 hour	1 hours	2.00
<input type="radio"/>	3	2 hours	2 hours	3.00

**How many units of Internet access would you like to purchase?**

\*Please kindly note that there will be no refund once connectivity is confirmed.  
\*Please note that the time block of selected service is based on continuous usage.

---

**Enter Payment Information (all info is required)** (all info is required)

Credit card number:

Credit card expiration date:  (MMYY)

Enter Email Address

---

**Submit Transaction and Login**

Figure 3-83 Service Selection Page (SecurePay)

## Successful Page


Successful Page	<b>Customize the message for the successful page</b>	
	Successful Message	<input type="text" value="You may now use the Internet !"/> <small>(Max. 80 characters)</small>
	Notification Message 1	<input type="text" value="IMPORTANT! Make a note of your username and password for logging in later. This will be your only opportunity to do so. Note upper and lowercase letters."/> <small>(Max. 100 characters)</small>
	Notification Message 2	<input type="text"/> <small>(Max. 100 characters)</small>
	Account Information	<input type="text" value="This is your account information, please keep this for your Internet Service."/> <small>(Max. 100 characters)</small>
	Username	<input type="text" value="Your username is"/> <small>(Max. 80 characters)</small>
	Password	<input type="text" value="Your password is"/> <small>(Max. 80 characters)</small>
	Usage Time	<input type="text" value="Your usage time is"/> <small>(Max. 80 characters)</small>
	Expiration Time	<input type="text" value="Please activate your account before"/> <small>(Max. 80 characters)</small> Format: <input type="text" value="yy/mm/dd"/> <input type="text" value="HH:mm:ss"/> <small>(HH:24h;mm:120;ss:AbWPM)</small>
	Submit Button	<input type="text" value="Use this account to LOGIN now"/> <small>(Max. 40 characters)</small>
 <a href="#">Preview of Successful Page</a>		

Figure 3-84 Successful Page Setting Screen

<b>Welcome</b>
<b>Hot Spot Internet Service</b>
<b>You may now use the internet !</b>
<b>IMPORTANT! Make a note of your username and password for logging in later. This will be your only opportunity to do so. Note upper and lowercase letters.</b>
<b>This is your account information, please keep this for your Internet Service.</b>
<b>Your username is WXY3dg54</b>
<b>Your password is 32JKew2</b>
<b>Your usage time is 30 minutes</b>
<b>Please activate your account before 2004/10/10 10:38:06</b>
<input type="button" value="Email this webpage to myself"/> <input type="button" value="Use this account to LOGIN now"/>

Figure 3-85 Example-Successful Page

## Fail Page

This function allows a service provider to customise the message for the login failed page.

Fail Page	
<b>Customize the message for the fail page</b>	
Notification Message 1	<input type="text" value="SORRY, your card could not be processed at this time"/> <small>(Max. 160 characters)</small>
Notification Message 2	<input type="text" value="Please use your backspace button and try again with a different card"/> <small>(Max. 160 characters)</small>
Notification Message 3	<input type="text" value="Thank you!"/> <small>(Max. 160 characters)</small>
Try Again Button	<input type="text" value="Try Again"/> <small>(Max. 40 characters)</small>
Close Button	<input type="text" value="Close"/> <small>(Max. 40 characters)</small>

 [Preview of Fail Page](#)

Figure 3-86 Fail Page Setting Screen

## User Agreement Page

This function allows the user to design a user agreement page that the user will be presented with after successful log in.

### CUSTOMIZATION

Login Page	Logo	Information Window	Account Printout	Credit Card	User Agreement Page
Title		<input type="text" value="User Agreement Page"/> (Max: 100 characters)			
Title Text Color		<input type="text" value="000000"/> <a href="#">View Color Grid</a>			
Article		<input type="text" value=""/> (Max: 5000 characters)			
Article Text Color		<input type="text" value="000000"/> <a href="#">View Color Grid</a>			
Article Background Color		<input type="text" value="FFFFFF"/> <a href="#">View Color Grid</a>			
Page Background Color		<input type="text" value="FFFFFF"/> <a href="#">View Color Grid</a>			
Agree Button		<input type="text" value="Agree"/> (Max: 50 characters)			
Disagree Button		<input type="text" value="Do not agree"/> (Max: 80 characters)			
					<a href="#">Standard User Agreement Page Preview</a>
					<input type="button" value="Apply"/>

Figure 3-87 User Agreement Page Setting Screen

User Agreement Page
<input type="button" value="Agree"/> <input type="button" value="Do not agree"/>

Figure 3-88 User Agreement Page

## 3-2-10 Pass Through

The passthrough function allows the administrator to add the MAC addresses of devices on the LAN that can access the internet without the requirement to have a user name and password for authentication.

### PASS THROUGH

**Pass Through:** Disable

Pass Through Destination allows the subscribers to access specified Internet websites without authentication, which is useful to promote selected services. Pass Through Subscriber is useful for YIP users without authentication. Pass Through LAN device is also useful for devices that do not have a web browser (cash registers, for example) or that are connected with LAN port (wireless access points, for example).

**Please enter new pass through for destination** (up to 50 entries)

URL or Website:

Start / End IP Address:  -

**Please enter new pass through for subscribers or LAN devices** (up to 90 entries)

Start / End IP Address:  -

IP Address:  Subnet Mask:

MAC address:  Mask: FF-FF-FF-FF-FF-FF

**Pass Through List**

No.	Active	Address List	Type	Delete

Figure 3-89 Pass through Setting Screen

## 3-2-11 Filtering

Filtering allows the system administrator to have a list of restricted destinations which users will not be able to view. This is useful to block specified Internet websites or Intranet areas.

**FILTERING**

Filtering: Disable ▾

Filtering allows the system administrator to have a list of restricted destinations, which is useful to block specified Internet websites or Intranet areas.

**HTTP Message to display when a website is blocked**

**Please enter new restricted destination (up to 90 entries)**

URL or Website:

Start / End IP Address:  -

IP Address:  Subnet Mask:

**Restricted Destination List**

No.	Active	Address List	Delete
			<input type="button" value="Delete All"/>

Figure 3-90 Filtering Setting Screen

Item	Default	Description
Filtering	Disable	Enables or disables filtering function.
HTTP Message to display when a website is blocked	The Web Site is blocked by System	Enter the http message. The maximum character of the HTTP message is 200.

Warning !!

This Web Site is blocked by System

Figure 3-91 Error Dialog Box



## 3-2-12 Share

This feature allows the sharing of network devices after the subscriber has successfully logged in.

**SHARE**

Share LAN resource:

This feature allows to share the network resource after subscriber successful login.

Please enter new sharing LAN resource (up to 50 entries)

Resource Name	Resource IP Address	Resource MAC Address	Interface
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Wired"/>

Share Resource List

No.	Active	Resource Name	IP Address	MAC address	Interface	Delete
						<input type="button" value="Delete"/>

Figure 3-92 Share Device Setting Screen

Item	Default	Description
Share LAN resource	Disable	Enables or disables share LAN resource function.
Resource Name	Empty	Enter the device name. The maximum character of the resource name is 30.
Resource IP Address	Empty	Enter the IP address of device in the format "xxx.xxx.xxx.xxx".
Resource MAC Address	Empty	Enter the MAC address of device. For input the device MAC address, please use this format such like "0050BA8D2296".
Interface	Wired	Select the interface.
Share LAN resource List		
No.	-	The index number of share LAN device.
Active	Disable	Click on check box, active or inactive the share LAN device.
Resource Name	-	Display the device name.
IP Address	-	Display the IP address of device.
MAC Address	-	Display the MAC address of device.
Interface	-	Display the interface of device.
Delete	Disable	Select the check boxes and click 'Delete' to delete the share device(s).

Note:

- You must use the "Search IP" method to search for a device on the network. Please follow steps below to search for your device.
  - Click Start, and then click Search.
  - Click Computers or People.
  - Click "A computer on the network".
  - In Computer, type the IP address of the device you want to find. Click Search.
- This function supports only Unicast and IP Protocols.

## 3-2-13 Portal Page

This feature allows for the redirecting of a subscriber's browser to a specified portal page after successful login.

**PORTAL PAGE**

This feature allows to redirect subscriber's browser to a specified portal page after successful login

<b>URL Link:</b>	<input type="text"/>
------------------	----------------------

*Figure 3-93 Portal Page Setting Screen*

Click Apply button to save the new settings.

Click **Apply** button, the success dialog box appears. Click on **Back** to return to Portal Page setting screen.

## 3-2-14 Advertisement

The system allows the service provider to input up to 10 URL links for advertising purposes. These will display as pop ups whilst the user is accessing the service.

**ADVERTISEMENT**

This feature allows ISP to specify the advertisement URL link. The advertisement Web page will show on the browser when the subscribers start Network access.

<b>Frequency</b>	<input checked="" type="radio"/> One Time Only <input type="radio"/> Every <input type="text" value="5"/> Min(s)
<b>Sequence</b>	<input checked="" type="radio"/> Randomly <input type="radio"/> Orderly (From 1 to 10)
<b>URL Link 1</b>	<input type="text"/>
<b>URL Link 2</b>	<input type="text"/>
<b>URL Link 3</b>	<input type="text"/>
<b>URL Link 4</b>	<input type="text"/>
<b>URL Link 5</b>	<input type="text"/>
<b>URL Link 6</b>	<input type="text"/>
<b>URL Link 7</b>	<input type="text"/>
<b>URL Link 8</b>	<input type="text"/>
<b>URL Link 9</b>	<input type="text"/>
<b>URL Link 10</b>	<input type="text"/>

Figure 3-94 Advertisement URL Link Setting Screen

Item	Default	Description
<b>Frequency</b>	One Time Only	One Time Only – will send the advertisement link once after the subscriber Login.
		Every~Min(s) – will send the advertising link every interval minutes. The value range is 1 to 60 (minutes).
<b>Sequence</b>	Randomly	Randomly – Displays the advertisement page in a random order.
		From 1 to 10 —Displays the advertising page in the order as set.
<b>URL Link 1~10</b>	Empty	This function allows the administrator to input ten different websites in the table for advertising. These 10 websites will display at random when the subscriber logs into the HS960 system. The maximum character of the URL Link # is 200.

## 3-2-15 Walled Garden

The Walled garden feature allows the administrator to list up to 10 web addresses that can be accessed without being required to log in with a username and password.

**WALL GARDEN**

This feature allows subscribers to access the specific Web pages even they didn't have a username or password. We provide ten URL links to use for free trying and can use for advertisement.

Link 1	Name: <input type="text" value="Yahoo"/> <b>Yahoo</b> URL: <input type="text" value="www.yahoo.com"/> <b>www.yahoo.com</b>
Link 2	Name: <input type="text" value="MSN"/> <b>MSN</b> URL: <input type="text" value="www.msn.com"/> <b>www.msn.com</b>
Link 3	Name: <input type="text" value="Microsoft"/> <b>Microsoft</b> URL: <input type="text" value="www.microsoft.com"/> <b>www.microsoft.</b>
Link 4	Name: <input type="text"/> URL: <input type="text"/>
Link 5	Name: <input type="text"/> URL: <input type="text"/>
Link 6	Name: <input type="text"/> URL: <input type="text"/>
Link 7	Name: <input type="text"/> URL: <input type="text"/>
Link 8	Name: <input type="text"/> URL: <input type="text"/>
Link 9	Name: <input type="text"/> URL: <input type="text"/>
Link 10	Name: <input type="text"/> URL: <input type="text"/>

Figure 3-95 Walled Garden

These 10 sites will display on the front log in screen.

**Welcome**

**Hot Spot Internet Service**

Username:

Password:

**Name**

Yahoo

MSN

Microsoft

Figure 3-96 Login Page

### 3-2-16 DDNS (Dynamic Domain Name Service)

An IP Registry provides a public central database where information such as email addresses, host names, IP addresses etc. can be stored and retrieved. This solves the problems if your DNS server uses an IP associated with dynamic IP addresses. When the ISP assigns the HS960 a new IP, the HS960 must inform the DDNS server the change of this IP so that the server can update its IP-to-DNS entry. Once the IP-to-DNS table in the DDNS server is updated, the DNS name for your web server (i.e., xyz.dyndns.org) is still usable.

**DDNS**

Force to update every  day(s) when WAN IP address keeps no change

No.	Active	Settings	Update Status Now
01	<input type="checkbox"/>	<p><b>Status: N/A</b></p> <p>Service Provider: <input type="text" value="dyndns.org (www.dyndns.org)"/> <input type="button" value="v"/></p> <p>Registered Host Name: <input type="text" value=""/></p> <p><small>(for example: xyz.dyndns.org)</small></p> <p>Login Name: <input type="text" value=""/> <small>(max. 28 characters)</small></p> <p>Password: <input type="text" value=""/> <small>(max. 28 characters)</small></p> <p>Email Address: <input type="text" value=""/> <small>(optional)</small></p> <p><input type="checkbox"/> Wildcards (optional)</p>	
02	<input type="checkbox"/>	<p><b>Status: N/A</b></p> <p>Service Provider: <input type="text" value="dyndns.org (www.dyndns.org)"/> <input type="button" value="v"/></p> <p>Registered Host Name: <input type="text" value=""/></p> <p><small>(for example: xyz.dyndns.org)</small></p> <p>Login Name: <input type="text" value=""/> <small>(max. 28 characters)</small></p> <p>Password: <input type="text" value=""/> <small>(max. 28 characters)</small></p> <p>Email Address: <input type="text" value=""/> <small>(optional)</small></p> <p><input type="checkbox"/> Wildcards (optional)</p>	
03	<input type="checkbox"/>	<p><b>Status: N/A</b></p> <p>Service Provider: <input type="text" value="dyndns.org (www.dyndns.org)"/> <input type="button" value="v"/></p> <p>Registered Host Name: <input type="text" value=""/></p> <p><small>(for example: xyz.dyndns.org)</small></p> <p>Login Name: <input type="text" value=""/> <small>(max. 28 characters)</small></p> <p>Password: <input type="text" value=""/> <small>(max. 28 characters)</small></p> <p>Email Address: <input type="text" value=""/> <small>(optional)</small></p> <p><input type="checkbox"/> Wildcards (optional)</p>	

Figure 3-97 DDNS Setting Screen

Item	Default	Description
Force to update every ~day(s) when WAN IP address keeps no change	1 day	Enter a number in the field to set the force update interval (in days).
No	01~03	The index number of a DDNS account.
Active	Disable	Click on check box, active or inactive the DDNS record.
<input type="button" value="Update Status Now"/>		Click the <b>Update Status Now</b> button to do manual update.
<b>Settings</b>		Enter the account information of DDNS Server.
<b>Status</b>	YY/MM/DD HH:MM:SS:	Display the update date, time and status. The Status area shows the updated time and current state of the DDNS Client.
		N/A—DDNS Client service not installed.
		Update Successfully—DDNS Client service installed; service running.
		Update Fail—DDNS Client service installed; service not running.
<b>Service Provider</b>	Dyndns.org (www.dyndns.org)	Select a DDNS service provider by clicking in the list box.  <i>Note: Before configuring the DDNS settings, you have to register a dynamic domain at one of the dynamic domain service providers' list box.</i>
<b>Registered Host Name</b>	Empty	Enter the host name of DDNS server. The maximum character of the registered host name is 100.
<b>Login Name</b>	Empty	Enter the user name of DDNS server.
<b>Password</b>	Empty	Enter the user password of DDNS server.
<b>Email Address</b>	Empty	Enter your email address. The DDNS Server will e-mail you important information once your Internet Name has been successfully registered.
<b>Wildcards (optional)</b>	Disable	Enable this function to be able to use *.mydomain.dyndns.org and not only mydomain.dyndns.org.

Click Apply button, the success dialog box appears. Click on Back to return to DDNS setting screen.

## 3-2-17 LAN Devices

The administrator can remotely control LAN Devices via the HS960 LAN devices feature.

**LAN DEVICES**

Detecting time:  Min(s)

No.	Device Name	Virtual Port (5900~5910) (60001~60050)	Device IP Address	Device Server Port	Device MAC Address	Application	Interface
1	Ethernet Switch	60001	192.168.100.123	80	009008002537	TCP	Wired
2		0		0		TCP	Wired
3		0		0		TCP	Wired
4		0		0		TCP	Wireless
5		0		0		TCP	Wired
6		0		0		TCP	Wired
7		0		0		TCP	Wired
8		0		0		TCP	Wired
9		0		0		TCP	Wired
10		0		0		TCP	Wired
47		0		0		TCP	Wired
48		0		0		TCP	Wired
49		0		0		TCP	Wired
50		0		0		TCP	Wired

Notice: The system does not support FTP

Figure 3-98 LAN Devices Setting Screen

Item	Default	Description
Polling Interval	5 Min.	The default value is 5 minutes. The Polling Interval valid range is 1 to 1440.
Device Name	Empty	The LAN device name. The maximum character of the device name is 20.
Virtual Port	0	The virtual port number valid range is 60001 to 60050 or 5900 to 5910.
Device IP Address	Empty	Enter the IP address of the LAN device in the format "xxx.xxx.xxx.xxx"
Device Server Port	0	Enter the server port of the LAN device.
Device MAC Address	Empty	The MAC address of the LAN device.
Application	TCP	Select one protocol type of the LAN device by clicking in the list box.
Interface	Wired	Select one interface of the LAN device by clicking in the list box.

Note: The system does not support FTP.

## 3-2-18 Syslog

This function allows the device to transmit event messages to your syslog server or your email address for remote monitoring and troubleshooting.

- Syslog Setting

**SYSLOG**

**Syslog** Log Settings

Send to Syslog Server	
<input checked="" type="radio"/> Disable <input type="radio"/> Enable	
<input type="checkbox"/> Syslog Server on LAN:	Server IP Address: <input type="text"/> Server MAC Address: <input type="text"/>
<input type="checkbox"/> Syslog Server on WAN:	Server 1 IP Address: <input type="text"/> Server 2 IP Address: <input type="text"/>

Send to Email	
<input checked="" type="radio"/> Disable <input type="radio"/> Enable	
IP Address or Domain Name:	SMTP Port: <input type="text" value="25"/>
Email Server:	<input type="checkbox"/> Email (SMTP) server needs to check my account Username: <input type="text"/> Password: <input type="text"/>
Email From:	Name: <input type="text"/> Email Address: <input type="text"/>
Email To:	Email Address 1: <input type="text"/> Email Address 2: <input type="text"/>

Figure 3-99 Syslog Setting Screen



Item	Default	Description
<b>Syslog</b>	Disable	Enables or disables the syslog server function.
<b>Syslog on LAN</b>		
<b>Server IP Address</b>	Empty	Enter the syslog server's IP address. The HS960 will send all of its logs to the specified syslog server.
<b>Server MAC Address</b>	Empty	Enter the syslog server's MAC address. The HS960 will send all of its logs to the specified syslog server.
<b>Syslog on WAN</b>		
<b>Server 1 IP Address</b>	Empty	Enter the IP address of first syslog server.
<b>Server 2 IP Address</b>	Empty	Enter the IP address of second syslog server.
<b>Send to Email</b>	Disable	Enables or disables the send to e-mail function.
<b>E-mail Server</b>		
<b>IP Address or Domain Name</b>	Empty	Enter the SMTP server IP address or domain name. The maximum allowed characters length is 50.
<b>SMTP Port</b>	25	The SMTP port allowed range is 25 or 2500 to 2599.
<b>E-mail (SMTP) Server needs to check my account</b>	Disable	If your SMTP server requires authentication before accepting e-mail, click on the check box. These values (username and password) are supplied by your network administrator, SMTP server provider or ISP.
<b>Username</b>	Empty	Enter the username for the SMTP server. The maximum allowed characters length is 64.
<b>Password</b>	Empty	Enter the password for the SMTP server
<b>Email From</b>		
<b>Name</b>	Empty	Enter the name you would like to appear in the "message from" field of your outgoing message. The maximum allowed characters length is 20.
<b>Email Address</b>	Empty	Enter your e-mail address. This is the address others will use to send email to Email Address 1/Email Address 2.
<b>Email To</b>		
<b>Email Address 1</b>	Empty	Enter your first e-mail address to receive the logs.
<b>Email Address 2</b>	Empty	Enter your second e-mail address to receive the logs.

## Log Categories

### SYSLOG

Syslog		Log Settings		
<b>System</b>				
Syslog	Email	Syslog Name	Description	Interval Time
<input type="checkbox"/>	<input type="checkbox"/>	System Information	A log including the system information will be sent according to specified interval time	60 minute(s)
<input type="checkbox"/>	<input type="checkbox"/>	System Boot Notice	Once system reboots, the log will be sent	When system reboot
<input type="checkbox"/>	<input type="checkbox"/>	System Manager Activity Information	A log will be sent if system manager (Administrator, Supervisor or Account Manager) login to or logout from the device	When system manager login or logout
<b>Subscriber</b>				
Syslog	Email	Syslog Name	Description	Interval Time
<input type="checkbox"/>	<input type="checkbox"/>	Wireless Association Information	A log including wireless users information will be sent according to specified interval time	60 minute(s)
<input type="checkbox"/>	<input type="checkbox"/>	Logged-In Users	A login user information will be sent according to specified interval time	60 minute(s)
<b>Proprietary Accounting</b>				
Syslog	Email	Syslog Name	Description	Interval Time
<input type="checkbox"/>	<input type="checkbox"/>	Account Created	A log will be sent once after an account is created	When an account is created
<input type="checkbox"/>	<input type="checkbox"/>	Account Activated	A log will be sent once after an account is activated	When an account is activated
<input type="checkbox"/>	<input type="checkbox"/>	Subscriber Trace	A log including subscriber login/logout time will be sent once after subscriber logout	When subscriber logout
<b>Billing</b>				
Syslog	Email	Syslog Name	Description	Interval Time
<input type="checkbox"/>	<input type="checkbox"/>	Billing Log	A log would be sent after a billing log is created	When log created
<b>LAN Devices Management Category</b>				
Syslog	Email	Syslog Name	Description	Interval Time
<input type="checkbox"/>	<input type="checkbox"/>	LAN Devices Information	A log including current LAN Device Status will be sent according to specified interval time	60 minute(s)
<input type="checkbox"/>	<input type="checkbox"/>	LAN Devices Alarm	A log will be sent if one of the LAN Device detected results "Fail"	When device fail
				<input type="button" value="Apply"/>

Figure 3-100 Log Settings Screen

Item	Interval Time	Description
Syslog	Disable	Click on the check box to send log information to your syslog server.
Email	Disable	Click on the check box to send log information to your e-mail address.
<b>System</b>		
Syslog Information	60 minutes	The log included system information would be sent according to specified interval time. <b>Format:</b> (Id, Mac Address) (System Uptime, 0 days 00h:04m:00s) (Location Name, Location Name) (WAN, FrameTxOK, FrameRxOK, FrameTxError, FrameRxError) (LAN, FrameTxOK, FrameRxOK, FrameTxError, FrameRxError), (Wireless, FrameTxOK, FrameRxOK, FrameTxError, FrameRxError)
System Boot Notice	When System reboot	If device is rebooted, log would be sent. <b>Format:</b> (Id, MAC Address) (System Up)
System Manager Activity Information	When system manager login or logout	A log will be sent if a system manager (Administrator, Supervisor or Account Manager) logs in or out from the device. <b>Format:</b> (Id, Mac Address) (System Account Activity Information, Username, User IP, Status) <b>Username:</b> Administrator   Supervisor   Accounting Operator <b>Status:</b> Login   Logout   Idle Time Out
<b>Subscriber</b>		
Wireless Association Information	60 minutes	A log including wireless associated users information will be sent according to specified interval time. <b>Format:</b> (Id, Mac Address) (Wireless Association Information, Number of associated users, Start Number, End number) (Signal strength, Signal quality, Connection speed, MAC address)(...)(...)(...)
Logged-in Users	60 minutes	A log including logged-in users information will be sent according to specified interval time. <b>Format:</b> (Id, Mac Address) (Logged-in Users, Type, Number of logged-in users, Start Number, End number) (Username, User IP, User MAC, Interface, Login time, RxData count, TxData count)(...)(...) <b>Type:</b> Dynamic   Super   User agreement   No Authentication If the type of Logged-in user is Super Subscriber, Username will be "*****". If the build-in account mode is disabled, Username is "Anonymous".
<b>Proprietary Accounting</b>		
Account Created	When an account is created.	A log would be sent if an account was created. <b>Format:</b> (Id, Mac Address) (Account Create, Type, S/N, Username, Unit, Account usage time, Billing profile information) <b>Type:</b> TimeToFinish   Accumulation   PostPaid <b>Billing profile information:</b> [index, name] <b>Account usage time:</b> 00:59:59 (example)
Account Activated	When an account is activated	A log would be sent if an account was activated. <b>Format:</b> (Id, Mac Address) (Account Activate, username, user IP, user MAC, Interface)

Item	Interval Time	Description
Subscriber Trace	When subscriber logout	<p>A log including subscriber's login or logout time will be sent once after the subscriber logs out.</p> <p><b>Format:</b> (Id, MAC Address) (Subscriber Trace, Type, Event, S/N, Username, User IP, User MAC, Interface, Login time, Logout time, Usage Time, Time Left, RxData count, TxData count)</p> <p><b>Type:</b> TimeToFinish   Accumulation   PostPaid   Super</p> <p><b>Event:</b> Finished   Replenished   Logout   Idle-Timeout   Account Expired   Deleted</p> <p>If the type of Subscriber Trace is Super, the Username will be "*****", and S/N will be "*****".</p> <p><b>Usage time:</b> 00:59:59 (example)</p>

## Subscriber Trace Relationship

Type	Event	Time Left
TimeToFinish	Finished	00:00:00
TimeToFinish	Replenished	00:12:00 to S/Nxxxxxx
TimeToFinish	Deleted	00:12:00
Accumulation	Finished	00:00:00
Accumulation	Replenished	00:12:00 to S/Nxxxxxx
Accumulation	Logout	00:48:00
Accumulation	Idle-Timeout	00:48:00
Accumulation	Deleted	00:48:00
Accumulation	Account Expired	00:48:00
PostPaid	Logout	*****
PostPaid	Idle-Timeout	*****
PostPaid	Deleted	*****
PostPaid	Finished	*****
PostPaid	Account Expired	*****
Super	Idle-Timeout	*****
Super	Deleted	*****

Item	Interval Time	Description
<b>Billing</b>		
<b>Billing Log</b>	When log created	<p>A log would be sent after a billing log is created.</p> <p><b>Format:</b> (Id, MAC Address) (Billing Log, Type, S/N, Username, Billing profile information, Units, Usage time, Bill, Payment)</p> <p><b>Type:</b> TimeToFinish   Accumulation   PostPaid</p> <p><b>Billing profile name:</b> [Name]</p> <p><b>Usage time:</b> "00:59:59" (example)</p> <p><b>Billing profile information:</b> [index, name]</p> <p><b>Payment:</b> Cash   Credit Card</p>
<b>LAN Devices Management Category</b>		
<b>LAN Devices Information</b>	60 minutes	<p>A log including current LAN Devices Status will be sent according to specified interval time.</p> <p><b>Format:</b> (Id, MAC Address) (LAN Devices Information, Number of devices, Start Number, End number) (Device name, Status)(...)(...)</p>
<b>LAN Devices Alarm</b>	When device fail	<p>A log will be sent if one of the LAN Devices detected results is "Fail".</p> <p><b>Format:</b> (Id, MAC Address) (LAN Device Alarm, Device name, FAIL)</p>

## 3-2-19 Session Trace

Session Trace is an intelligent function to help the service provider trace every user's access behavior. When "session trace" is enabled, the system will collect information such as destination IP, destination port, source IP, source MAC, source port by every user and send the collected information in text format file to specified TFTP server.

Figure 3-101 Session Trace Setting Screen

Item	Default	Description
Session Trace	Disable	Disables or enables session trace function.
Primary TFTP Server IP Address	Empty	Enter the IP address of the primary TFTP server.
Secondary TFTP Server IP Address	Empty	Enter the IP address of the second TFTP server.
Send Session Trace log file every~ minutes.	10 minutes	The field will send the session trace log file every interval minutes. The value range is 5 to 1440 (minutes).

## 3-2-20 Bandwidth

This function enables the administrator to limit bandwidth usage on a per user basis (MAC address). This prevents users from consuming a disproportionately large amount of bandwidth so every user gets a fair share of the available bandwidth.

**BANDWIDTH**

**Bandwidth Management:**

The function enables administrator to limit bandwidth usage on a per user basis (MAC address). That prevents users from consuming a disproportionately large amount of bandwidth so every user gets a fair share of the available bandwidth.

**Please setup the maximum Upstream/Downstream bandwidth:**

Maximum Upstream:   Kbps (64-5120)

Maximum Downstream:   Kbps (64-5120)

Figure 3-102 Bandwidth Setting Screen

Item	Default	Description
Bandwidth	Disable	Enables or disables Bandwidth Management.
Maximum Upstream	64Kbps	Specify the amount of upstream bandwidth.
Maximum Downstream	128Kbps	Specify the amount of downstream bandwidth.

## 3-2-21 Secure Remote

This feature allows the administrator to create a secure connection to a remote site or back end system with a VPN PPTP Client. If “Secure Remote” is enabled, the RADIUS packet/ syslog will be transferred to this secure connection.

Figure 3-103 Secure Remote Setting Screen

Item	Default	Description
Auto-connect at Start-up (Always connect)	Disable	Enable the check box to automatically establish the PPTP connection.
PPTP Server IP address	Empty	Enter the PPTP server IP address provided by your ISP.
Username	Empty	Enter the user name provided by your ISP. The user name can consist of up to 80 alphanumeric characters and is case sensitive.
Password	Empty	Enter the user password provided by your ISP. The password can consist of up to 80 alphanumeric characters and is case sensitive.
Start connection		Click on Start/Stop connection button to start/stop PPTP connection.



## 3-2-22 SNMP

The SNMP Agent Configuration screen enables you to access to your device via Simple Network Management Protocol. You must first enable SNMP on the SNMP Agent Configuration screen.

**SNMP**

SNMP:

SNMP Port:  ( 161 or 16100 ~ 16199 )

Trap Port:  ( 162 or 16200 ~ 16299 )

No	Community Name	NMS Address	Privileges	Status
1	<input type="text" value="public"/>	<input type="text" value="ANY"/>	<input type="button" value="Read"/>	<input type="button" value="Valid"/>
2	<input type="text" value="private"/>	<input type="text" value="ANY"/>	<input type="button" value="Write"/>	<input type="button" value="Valid"/>
3	<input type="text"/>	<input type="text" value="ANY"/>	<input type="button" value="Read"/>	<input type="button" value="Invalid"/>
4	<input type="text"/>	<input type="text" value="ANY"/>	<input type="button" value="Read"/>	<input type="button" value="Invalid"/>
5	<input type="text"/>	<input type="text" value="ANY"/>	<input type="button" value="Read"/>	<input type="button" value="Invalid"/>

Figure 3-104 SNMP Setting Screen

Item	Default	Description
<b>SNMP</b>	Disable	Disables or enables the SNMP management.
<b>SNMP Port</b>	161	If the SNMP enables, also allowed to specific the SNMP port number via NAT. The allowed SNMP port numbers are 161 (default), 16100-16199 and Trap port numbers are 162 (default), 16200-16299. This Port setting is useful for remote control via NAT network.
<b>Trap Port</b>	162	
<b>Configuration</b>		
<b>Community Name</b>	public/private	Every unit with SNMP enable must be configured to recognize one or more community names up to 20 characters. The default setting for the community of entry 1 is "public" and for the entry 2 is "private" and others are empty.
<b>NMS Address</b>	ANY	The address of the NMS. The default settings for the NMS Networking are "ANY".
<b>Privileges</b>	Read/Write	Choose "Read", "Write", "Trap Recipients" and "All" for different privileges. The default setting of the entry 2 is "write" and others are "read".
<b>Status</b>	Valid/Invalid	Chosen "Valid" or "Invalid". The default setting of entry 1, 2 are valid and others are invalid.

### WIRELESS

General Settings	ESSID: <input type="text" value="Wireless"/>
	Channel: <input type="text" value="0"/>
	Security: <input checked="" type="radio"/> Disable
	<input type="radio"/> WPA
	Group Key Rekeying per <input type="text" value="86400"/> seconds
	<input checked="" type="radio"/> Use WPA with Pre-shared Key
	Pre-shared Key: <input type="text" value=""/> (8-63 characters)
	<input type="radio"/> Use WPA with RADIUS Server
	Server IP: <input type="text" value=""/>
	Authentication Port: <input type="text" value="1812"/>
	Shared Secret Key: <input type="text" value=""/>
	<input type="radio"/> WEP
	Use Static WEP
	Encryption: <input checked="" type="radio"/> 64 bit <input type="radio"/> 128 bit
	Mode: <input type="text" value="HEX"/>
	WEP Key:
	<input checked="" type="radio"/> 1. <input type="text" value="00000000"/>
	<input type="radio"/> 2. <input type="text" value="00000000"/>
	<input type="radio"/> 3. <input type="text" value="00000000"/>
	<input type="radio"/> 4. <input type="text" value="00000000"/>
	Note: You have to restart the system to apply the WEP settings
<p style="color: red;">Do not change any setting below unless you make sure you understand all the meaning of setting . You can press "DEFAULT" to restore the wireless factory default setting once you made setting changed to cause wireless not work</p>	
Beacon Interval	<input type="text" value="100"/> (Unit: msec, range 20-866, default 100)
RTS Threshold	<input type="text" value="2347"/> (range:1-2347, default:2347)
Fragmentation Threshold	<input type="text" value="2432"/> (range:256-2452, default:2432, even number only)
Preamble Type	<input type="radio"/> Short Preamble <input checked="" type="radio"/> Long Preamble <input type="radio"/> Dynamic Preamble
Authentication Method	<input checked="" type="radio"/> Open System <input type="radio"/> Shared Key <input type="radio"/> Both
<input type="button" value="Default"/> <input type="button" value="Apply"/>	

Figure 3-105 Wireless Setting Screen

Item	Default	Description
<b>General Settings</b>		
ESSID	Wireless	The ESSID is the unique name that is shared among all points in a wireless network. It is case sensitive and must not exceed 32 characters.
Channel	6	Select the channel ID for wireless connection.
Security	Disable	Select disable to allow wireless station to communicate with the device without any data encryption. Select enable to enable WPA or WEP data encryption.
WPA Encryption	Wi-Fi Protected Access Encryption	
Pre-shared Key	Empty	Enter a pre-shared key from 8 to 63 case sensitive ASCII characters.
Group Key Re-Keying	86400 Seconds	Enter a number in the field to set the force re-keying interval.
Use WPA with Pre-shared Key	Enable	
Pre-Shared Key	Empty	Enter a pre-shared key from 8 to 63 case sensitive ASCII characters.
Use WPA with RADIUS	Disable	
Server IP	Empty	Enter the RADIUS server IP address or domain name. The maximum allowed characters length is 15.
Authentication Port	1812	Enter the authentication port number. The allowed numbers are from 0 to 65535.
Share Secret Key	Empty	Enter the RADIUS secret key
WEP Encryption	Wired Equivalent Privacy Encryption	
Encryption	64 bit	The HS960 supports 64-bit or 128 bit WEP encryption.
Mode	HEX	Options: HEX (Hexadecimal) and ASCII (American Standard Code for Information Interchange).
WEP Key	1	<p>This selects which of the Keys the HS960 uses when it transmits. You can change the selected encryption key every now and then to increase the security of your network.</p> <p><i>Note: You have to configure all WEP keys (1–4), and select one of the four WEP key.</i></p> <p><i>Enter 5 characters (case sensitive) for ASCII 64-bit WEP Key.</i></p> <p><i>Enter 10 characters (case sensitive) for Hex 64-bit WEP Key.</i></p> <p><i>Enter 13 characters (case sensitive) for ASCII 128-bit WEP Key.</i></p> <p><i>Enter 26 characters (case sensitive) for Hex 128-bit WEP Key.</i></p>
802.1x	Disable	Enables or disables the 802.1x function.
Encryption	64 bit	The HS960 supports 64-bit or 128 bit 802.1x encryption.
Re-key Time	86400 Seconds	Enter a number in the field to set the force re-keying interval.
Server IP	Empty	Enter the RADIUS server IP address or domain name. The maximum allowed characters length is 15.
Authentication Port	1812	Enter the authentication port number. The allowed numbers are from 0 to 65535.
Share Secret Key	Empty	Enter the RADIUS secret key.

Item	Default	Description
<b>Beacon Interval</b>	200	This valid value range is 1 to 1000 and indicates the frequency interval of the beacon.
<b>RTS Threshold</b>	2347	This valid value range is 256-2342. This setting determines the packet size at which the HS960 issues a request to send (RTS) before sending the packet. A low RTS Threshold setting can be useful in areas where many client devices are associating with the HS960 , or in areas where the clients are far apart and can detect only the HS960 and not each other.
<b>Fragmentation Threshold</b>	2432	This setting determines the size at which packets are fragmented. Enter a setting ranging from 256 to 2432 bytes. Use a low setting in areas where communication is poor or where there is a great deal of radio interference.
<b>Preamble Type</b>	Long Preamble	The preamble type is a section of data at the head of a packet that contains information the HS960 and client devices need when sending and receiving packets. The setting menu allows you to select a long, short or dynamic preamble type.
<b>Authentication Method</b>	Open System	<p>Select Open System, Shared Key or both.</p> <p><b>Open System</b> – Allows any device to authenticate and then attempt to communicate with the HS960 . Using open authentication, any wireless device can authenticate with the HS960, however the device can only communicate if its WEP key matches the HS960. Devices not using WEP do not attempt to authenticate with a Wireless Service Gateway that is using WEP.</p> <p><b>Shared Key</b> – During shared key authentication, the HS960 sends an unencrypted challenge text string to any device attempting to communicate with the HS960 . The device-requesting authentication encrypts the challenge text and sends it back to the HS960 . If the challenge text is encrypted correctly, the HS960 allows the requesting device to authenticate. Both the unencrypted challenge and the encrypted challenge can be monitored, however, which leaves the HS960 open to attack from an intruder who calculates the WEP key by comparing the unencrypted and encrypted text strings. Because of this weakness, shared key authentication can be less secure than open authentication.</p> <p><b>Both</b> – With this setting wireless stations can communicate with or without data encryption.</p>

## 3-2-24 Account Generator

**ACCOUNT GENERATOR**

Account Generator:

Socket Port:  (1001-1005)

Encryption:  Disable  
 Enable  
 Secret Key :  (max:8 characters)

Ethernet Thermal Printer IP Address :

1.	<input type="text" value="10.58.1.250"/>
2.	<input type="text"/>
3.	<input type="text"/>
4.	<input type="text"/>
5.	<input type="text"/>
6.	<input type="text"/>
7.	<input type="text"/>
8.	<input type="text"/>
9.	<input type="text"/>
10.	<input type="text"/>

Figure 3-106 Account Generator Printer Setting Screen

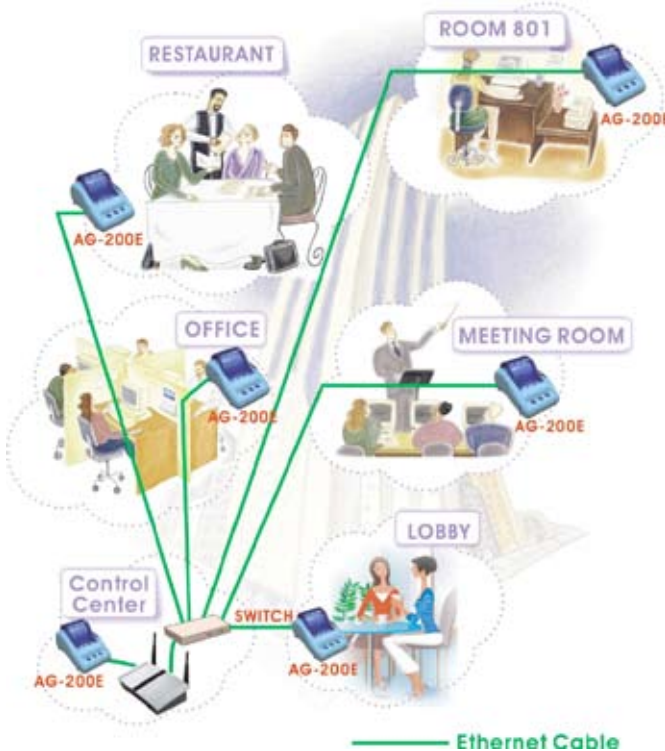


Figure 3-107 Application

## 3-3 System Status



Display HS960 system basic status, including,

1. System
2. Account List
3. Account Log
4. Current User
5. DHCP Clients
6. Session List
7. LAN Devices

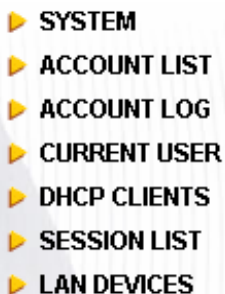


Figure 3-108 System Status Item Screen

## 3-3-1 System

The System Information Menu displays current system basic information including the service connection message, host name, LAN, WAN, DHCP Configuration, DNS, E-mail Redirection, SSL Certificate, network traffic information and the system firmware version number.

### SYSTEM

Display the detailed system information		
<b>Service</b>	Internet Connection	OK
	Wireless Service	OK
<b>System</b>	System Name	
	Domain Name	
	Firmware Version	1.02.08
	Wireless Version	1.2.8
	Bootrom Version	1.02
	WAN MAC Address	00:90:DE:00:9B:CC
	LAN MAC Address	00:90:DE:00:9B:CB
	System Time	2006/4/28 16:48:50
System Up Time	00:00H 22M 24S	
<b>LAN IP</b>	IP Address	10.59.1.1
	Subnet Mask	255.255.255.0
<b>WAN IP</b>	WAN Port Mode	Static IP
	IP Address	192.168.100.191
	Subnet Mask	255.255.255.0
	Gateway IP address	192.168.100.254
<b>DNS</b>	Primary DNS Server	188.86.1.1
	Secondary DNS Server	
<b>DHCP</b>	DHCP Status	Server
	Start IP Address	10.59.1.2
	End IP Address	10.59.1.254
	Lease Time	300
<b>Wireless</b>	ESSID	Wireless
	Channel	6
	Secure Mode	Disable
<b>E-Mail</b>	192.168.100.3	

Figure 3-109 System Status Screen

Network Traffic	WAN Traffic	Tx Data: 470774 Rx Data: 2471680 Tx Error: 0 Rx Error: 0
	LAN Traffic	Tx Data: 4384656 Rx Data: 696411 Tx Error: 0 Rx Error: 0
	Wireless Traffic	Tx Data: 2 Rx Data: 0 Tx Error: 0 Rx Error: 0
Location Information	Location	
	Address	
	City	
	State	
	Zip	
	Country	
	Contact Name	
	Contact Telephone	
	Contact FAX	
Contact Email		
SSL Certificate	Country	00
	State	Local State
	Local City	Local City
	Organization	Local Group
	Organization Unit	Local Host
	Common Name	1.1.1.1
	Email Address	mail@1.1.1.1

Figure 3-110 System Status Screen



## 3-3-2 Account List

You can display a list of all the account information on this device. This table includes the username, password, usage time, time created, login time, expiration time and status.

**ACCOUNT LIST**

List existing account's information. [refresh](#)

S/N	Status	Username	Usage Time	Time Created	Login Time	Expiration Time	Delete
000001	Un-used	hs92hk46	0:30:00	2005/2/14 13:44:46		2005/2/15 01:44:46	<input type="checkbox"/>
000002	Un-used	ubvnp552	1:00:00	2005/2/14 13:44:51		2005/2/15 01:44:51	<input type="checkbox"/>
000003	Un-used	ggqkg54	2:00:00	2005/2/14 13:44:54		2005/2/15 01:44:54	<input type="checkbox"/>
000004	Un-used	38t6qm57	2:00:00	2005/2/14 13:44:57		2005/2/15 01:44:57	<input type="checkbox"/>
000005	In-used	yfp23n33	2:00:00	2005/2/14 13:45:03	2005/2/14 13:45:40	2005/2/14 15:45:40	<input type="checkbox"/>

[GO](#)  Page 
[Delete](#) [Delete All](#)

First Previous Next End

Figure 3-111 Account List

## 3-3-3 Account Log

The account log shows the accounts' log information.

**ACCOUNT LOG**

List account's log. [Export](#) [Clear Log](#) [refresh](#)

S/N	Username	Time Created	Login Time	Usage Time	Charge	Payment Info	Status
000001	hs92hk46	2005/2/14 13:44:46		0:30:00	1.00	Cash	Un-used
000002	ubvnp552	2005/2/14 13:44:51		1:00:00	2.00	Cash	Un-used
000003	ggqkg54	2005/2/14 13:44:54		2:00:00	3.00	Cash	Un-used
000004	38t6qm57	2005/2/14 13:44:57		2:00:00	3.00	Cash	Un-used
000005	yfp23n33	2005/2/14 13:45:03	2005/2/14 13:45:40	2:00:00	3.00	Cash	In-used

[GO](#)  Page 
First Previous Next End

Figure 3-112 Account Log

## 3-3-4 Current User

Display the current logged-in subscribers' status. It allows the service provider to disconnect subscribers.

List current user's information such as IP address and MAC address. [refresh](#)

No.	Type	Username	IP Address	MAC Address	Disconnect
1	Dynamic	yfp23n33	192.168.100.192	00:0C:6E:56:56:6E	<input type="checkbox"/>

**Disconnect** **Disconnect All**

[HGO](#)  Page First Previous Next End

Figure 3-113 Current User List

**CURRENT USER**

List current user's information such as IP address and MAC address. [refresh](#)

NO.	Type	Username	IP Address	MAC Address	Disconnect
1	Superuser	super	192.168.100.192	00:0C:6E:56:56:6E	<input type="checkbox"/>

**Disconnect** **Disconnect All**

[HGO](#)  Page First Previous Next End

Figure 3-114 Current User List (super account)

**CURRENT USER**

List current user's information such as IP address and MAC address. [refresh](#)

No.	Type	IP Address	MAC Address
1	Non_Auth	192.168.100.192	00:0C:6E:56:56:6E

[HGO](#)  Page First Previous Next End

Figure 3-115 Current User List (No Authentication)

## 3-3-5 DHCP Clients

The DHCP client table shows the current DHCP users on the LAN.

**DHCP CLIENTS**

DHCP Client's information, including assigned IP address and MAC address.

No.	MAC Address	IP Address
1	00:20:2D:4B:88:DE	10.59.1.2
2	00:00:CA:19:7D:58	10.59.1.3

Figure 3-116 Current User Screen

### 3-3-6 Session List

The remote site administrator could monitor the real time usage status of HS960 via this page.

**SESSION LIST**

List of sessions of Network events. Incoming and outgoing packet information, including source IP address, destination IP address, and port number.

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No.	TCP/UDP	Client IP	Client Port	Port Fake	Remote IP	Remote Port	Idle
1	TCP	192.168.100.192	4672	50013	207.46.106.94	1863	25
2	TCP	192.168.100.192	4717	50046	207.46.106.47	1863	120

Page
 
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 Next 
 End

Figure 3-117 Session List Screen

### 3-3-7 LAN Devices

You can manage all devices by clicking on device name to access device's Web-based interface.

**LAN DEVICE**

We detect below listed devices to check if alive every 5 min.  
You can manage below listed devices by clicking device name to access its Web-based UI.

NO.	Device Name	Status	Virtual Port (5000~5910) (60001~60050)	Device IP Address	Device Server Port	Device MAC Address	Application	Interface
1	<a href="#">Ethernet Switch</a>	OK	60001	192.168.100.123	80	00.90.0E.00.25.37	TCP	Wired

Figure 3-118 LAN Devices Status Screen

## 3-4 System Tools



This allows service provider or administrator to process Firmware upgrade, change password and backup or restore configuration.

1. Configuration
2. Firmware
3. Boot Code
4. System Account
5. SSL Certificate
6. Ping Command
7. Restart
8. Logout

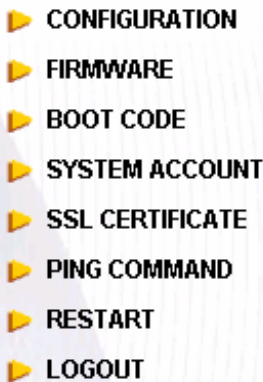


Figure 3-119 System Tools Item

## 3-4-1 Configuration

Use the Configuration item to save, restore or reset configuration parameters of the HS960 .

**CONFIGURATION**

This feature can backup the system configuration from this device to your PC or restore your stored system configuration to this device.

**Backup**

Click Backup to backup the system configuration from this device to your computer or to the remote TFTP server.

Remote TFTP Server IP Address:

File Name:  Apply

**Restore**

To restore your stored system configuration to this device.

Local PC File Path:  Browse... Apply

Remote TFTP Server IP Address:  Apply

File Name:  Apply

**Reset the system back to factory defaults**

Keep subscriber profile Apply

Figure 3-120 Configuration Setting Screen

Item	Default	Description
<b>Backup</b>		Click it to save the system configuration to your computer. (export.cfg)
<b>Remote TFTP Server IP Address</b>	Empty	Enter the IP address of TFTP Server.
<b>File Name</b>	Empty	Enter the file name in the File Name field.
<b>Restore</b>		Click it to restore your system configuration.
<b>Local PC File Path</b>	Empty	Enter the file pathname of the system configuration file in the Local PC File Path field.
<b>Remote TFTP Server IP Address</b>	Empty	Enter the IP address of TFTP Server.
<b>File Name</b>	Empty	Enter the file name in the File Name field.
<b>Reset the system back to factory defaults</b>		Erase all setting and back to factory setting.
<b>Keep subscriber profile</b>	Disable	Click the keep subscriber profile to change all the parameters into factory settings but still reserve the subscriber profiles.

## 3-4-2 Firmware Upgrade

The Firmware Upgrade menu loads updated firmware into the flash ROM. After downloading the new firmware, the agent will automatically restart it.

### Manual Firmware Upgrade

**FIRMWARE**

Manual Firmware Upgrade | Scheduled Firmware Upgrade

To upgrade the firmware, click **Browse** to locate the firmware file or use remote TFTP server and click **Apply**.

Local PC File Path  **Browse...** **Apply**

Remote TFTP Server IP Address  File Name  **Apply**

Figure 3-121 Manual Firmware Upgrade Setting Screen

**Note:**

1. Before downloading the new firmware, users must save the configuration file for restore configuration parameters of the device.
2. Do not turn the power off during the upgrade process. This will damage the unit.

### Scheduled Firmware Upgrade

Scheduled Firmware Upgrade is a program that enables an automatic upgrade to the latest firmware version through the TFTP server.

**FIRMWARE**

Manual Firmware Upgrade | Scheduled Firmware Upgrade

This feature allows you to upgrade the system firmware on a regular (hourly / daily / weekly) basis automatically.

**Disable**  
 **Enable**

TFTP Server IP

File Synchronization  [View Sample File](#)

Frequency  Weekly  Daily  Hourly  
  Hour  Min.

**Apply**

Figure 3-122 Scheduled Firmware Upgrade Setting Screen

*Note: Do not turn the power off during the upgrade process. This will damage the unit.*

## 3-4-3 Boot Code

**BOOT CODE**

To upgrade the Boot Code, click **Browse** to locate the file and click **Apply**.

Local PC file Path  **Browse...** **Apply**

Figure 3-123 Boot Code Upgrade Setting Screen

### 3-4-4 System Account

Use the System Account screen to change the system accounts.

SYSTEM ACCOUNT	
<b>Administrator Account</b>	
Administrator can fully control this system and modify all settings.	
Username:	<input type="text" value="admin"/>
Password:	<input type="password" value="admin"/>
Confirm:	<input type="password"/>
<b>Web-based Accounting Manager</b>	
Web-based accounting manager can operate the proprietary web-based accounting system.	
Username:	<input type="text" value="account"/>
Password:	<input type="password" value="account"/>
Confirm:	<input type="password"/>
<b>Supervisor Account</b>	
Supervisor can only view system status and change password.	
Username:	<input type="text" value="supervisor"/>
Password:	<input type="password" value="supervisor"/>
Confirm:	<input type="password"/>
<b>Super Subscriber Account</b>	
Super subscriber is a built-in subscriber account for system test or premium usage.	
Super Subscriber	<input type="text" value="Disable"/>
Idle Time Out	<input type="text" value="5"/> Min(s) (1 - 1440)
Username:	<input type="text" value="super"/>
Password:	<input type="password" value="super"/>
Confirm:	<input type="password"/>
<input type="button" value="Apply"/>	

Figure 3-124 System Account Setting Screen

## Administrator Account

- 1 Start your Web browser and enter the factory default IP address **10.59.1.1** in your browser's location box. Press Enter.

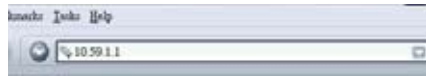


Figure 3-125 Web Browser Location Field (Factory Default)

- 2 The HS960 configuration main menu will appear. Enter **admin** (default) as the Username and **admin** (default) as the password and click **Login**. If you are first time setting the system, the wizard setup screen will appear.

Figure 3-126 Administrator Account Login Screen (First Time)

Or

### System Quick View

System <span style="float: right;"><a href="#">refresh</a></span>			
System/Host Name		Firmware Version	1.01.04
Location Name		Domain Name	
System Time	2005/2/14 14:18:40	System Up Time	00D:00H:34M:10S
WAN MAC address	00:90:0E:00:9B:0C	LAN MAC address	00:90:0E:00:9B:0B
Network			
WAN Status	<b>Established</b>	WAN Type	DHCP Client
WAN IP Address	192.168.100.125	LAN IP Address	10.59.1.1
WAN Subnet Mask	255.255.255.0	LAN Subnet Mask	255.255.255.0
Default Gateway	192.168.100.254	DNS	192.168.100.2
Wireless			
Wireless Service	<b>OK</b>	ESSID	Wireless
Wireless Channel	6	Secure Mode	Disable
Traffic			
WAN	TxData:188737 RxData:718565 TxError:0 RxError:0		
LAN	TxData:2661020 RxData:532634 TxError:0 RxError:0		
Wireless	TxData:0 RxData:0 TxError:0 RxError:0		
<a href="#">refresh</a>			

Figure 3-127 System Quick View



## Web-Based Accounting Manager

- 1 Start your Web browser and enter the factory default IP address 10.59.1.1 in your browser's location box. Press Enter.

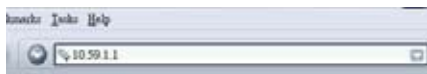


Figure 3-128 Web Browser Location Field (Factory Default)

- 2 The HS960 configuration main menu will appear. Enter **account** as the Username and **account** as the password and click **Login**



Figure 3-129 Web-Based Accounting Manager Login Screen

- 3 After a valid user name and password have been provided, the account Generator Panel homepage will appear.



Figure 3-130 Account Generator Panel

## Supervisor Account

- 1 Start your Web browser and enter the factory default IP address **10.59.1.1** in your browser's location box. Press Enter.



Figure 3-131 Web Browser Location Field (Factory Default)

- 2 The HS960 configuration main menu will appear. Enter **supervisor** as the Username and **supervisor** as the password and click **Login**.



Figure 3-132 Supervisor Account Login Screen

- 3 After a valid user name and password have been provided, the HS960 configuration homepage will appear.

## Super Subscriber Account

Start your Web Browser; a subscriber login page will appear. Enter **super** as the Username and **super** as the password and click Enter, you can use Internet now.



Figure 3-133 Subscriber Login Page

## 3-4-5 SSL Certificate

The function allows you to download the registered CA certificate into the HS960 .

**SSL CERTIFICATE**

This feature allows you to download the registered CA certificate into this device.

Password for Private Key:	<input type="text"/>
Certificate File:	<input type="text"/> Browse...
Private Key File:	<input type="text"/> Browse...

Figure 3-134 SSL Certificate Download Setting Screen

*Note: The password field must be the same as the CA's registered password.*

## 3-4-6 Ping Command

The Ping function can check the HS960 networking connective or not.

**PING**

This feature allows you to execute ping command.

```
Pinging www.hinet.net [61.219.38.89] with 32 bytes of data:
Reply from 61.219.38.89: bytes=32 time=90ms TTL=246
Reply from 61.219.38.89: bytes=32 time=30ms TTL=246
Reply from 61.219.38.89: bytes=32 time=40ms TTL=246
Reply from 61.219.38.89: bytes=32 time=30ms TTL=246
```

Figure 3-135 Ping Command Screen

Item	Description
IP or URL	Enter the IP address or the URL link.

## 3-4-7 Restart

If your HS960 is not operating correctly, you can choose this option to display the restart HS960 screen. Clicking the apply button restart the HS960, with all of your settings remaining intact.

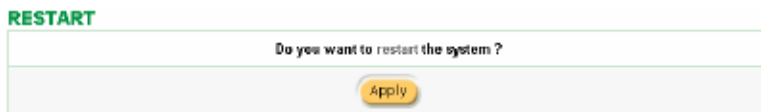


Figure 3-136 Restart Screen

## 3-4-8 Logout

If you would like to leave the configuration page, please click apply to exit.

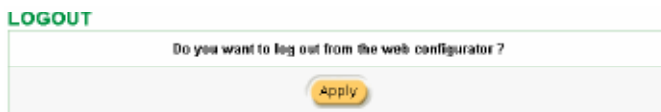


Figure 3-137 Logout Screen

## APPENDIX A SIGNAL CONNECTION ARRANGEMENTS

### RJ-45 Ethernet Port

The HS960 RJ-45 Ethernet port can connect to any networking devices that use a standard LAN interface, such as a Hub/Switch Hub or Router. Use unshielded twisted-pair (UTP) or shield twisted-pair (STP) cable to connect the networking device to the RJ-45 Ethernet port.

Depending on the type of connection, 10Mbps or 100Mbps, use the following Ethernet cable, as prescribed.

**10Mbps:** Use EIA/TIA-568-100-Category 3, 4 or 5 cable.

**100Mbps:** Use EIA/TIA-568-100-Category 5 cable.

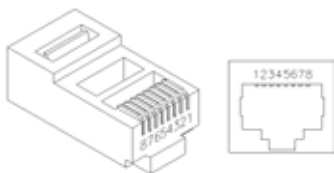


Figure A-1 RJ-45 Connector and Cable Pins

*Note: To prevent loss of signal, make sure that the length of any twisted-pair connection does not exceed 100 meters.*

## APPENDIX B REGULATIONS/EMI COMPLIANCE

### FCC Regulatory Statement

Part 15-Class B compliant device

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

- 1 This device may not cause harmful interference, and
- 2 This device must accept any interference received, including that which may cause undesired operation.

This equipment has been test and found to comply with the limits for a computing device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1 Reorient or relocate the receiving antenna.
- 2 Increase the separation between the equipment and receiver.
- 3 The equipment and the receiver should be connected the outlets on separate circuits.
- 4 Consult the dealer or an experienced radio/television technician for help.

Changes or modification not expressly approved be the party responsible for compliance could void the user's authority to operate the equipment.

## APPENDIX C: LEGAL & REGULATORY INFORMATION

This manual is copyright. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the Copyright Act, no part may be reproduced, stored in a retrieval system or transmitted in any form, by any means, be it electronic, mechanical, recording or otherwise, without the prior written permission of NetComm Limited. NetComm Limited accepts no liability or responsibility, for consequences arising from the use of this product.

NetComm Limited reserves the right to change the specifications and operating details of this product without notice.

NetComm is a registered trademark of NetComm Limited.

All other trademarks are acknowledged the property of their respective owners.

### Customer Information

ACA (Australian Communications Authority) requires you to be aware of the following information and warnings:

- (1) This unit shall be connected to the Telecommunication Network through a line cord which meets the requirements of the ACA TS008 Standard.
- (2) This equipment has been tested and found to comply with the Standards for C-Tick and/or A-Tick as set by the ACA. These standards are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio noise and, if not installed and used in accordance with the instructions detailed within this manual, may cause interference to radio communications. However, there is no guarantee that interference will not occur with the installation of this product in your home or office. If this equipment does cause some degree of interference to radio or television reception, which can be determined by turning the equipment off and on, we encourage the user to try to correct the interference by one or more of the following measures:
  - *Change the direction or relocate the receiving antenna.*
  - *Increase the separation between this equipment and the receiver.*
  - *Connect the equipment to an alternate power outlet on a different power circuit from that to which the receiver/TV is connected.*
  - *Consult an experienced radio/TV technician for help.*
- (3) The power supply that is provided with this unit is only intended for use with this product. Do not use this power supply with any other product or do not use any other power supply that is not approved for use with this product by NetComm. Failure to do so may cause damage to this product, fire or result in personal injury.

## Product Warranty

The warranty is granted on the following conditions:

1. This warranty extends to the original purchaser (you) and is not transferable;
2. This warranty shall not apply to software programs, batteries, power supplies, cables or other accessories supplied in or with the product;
3. The customer complies with all of the terms of any relevant agreement with NetComm and any other reasonable requirements of NetComm including producing such evidence of purchase as NetComm may require;
4. The cost of transporting product to and from NetComm's nominated premises is your responsibility; and,
5. NetComm does not have any liability or responsibility under this warranty where any cost, loss, injury or damage of any kind, whether direct, indirect, consequential, incidental or otherwise arises out of events beyond NetComm's reasonable control. This includes but is not limited to: acts of God, war, riot, embargoes, acts of civil or military authorities, fire, floods, electricity outages, lightning, power surges, or shortages of materials or labour.
6. The customer is responsible for the security of their computer and network at all times. Security features may be disabled within the factory default settings. NetComm recommends that you enable these features to enhance your security.

The warranty is automatically voided if:

1. You, or someone else, use the product, or attempts to use it, other than as specified by NetComm;
2. The fault or defect in your product is the result of a voltage surge subjected to the product either by the way of power supply or communication line, whether caused by thunderstorm activity or any other cause(s);
3. The fault is the result of accidental damage or damage in transit, including but not limited to liquid spillage;
4. Your product has been used for any purposes other than that for which it is sold, or in any way other than in strict accordance with the user manual supplied;
5. Your product has been repaired or modified or attempted to be repaired or modified, other than by a qualified person at a service centre authorised by NetComm; and,
6. The serial number has been defaced or altered in any way or if the serial number plate has been removed.

## Limitations of Warranty

The Trade Practices Act 1974 and corresponding State and Territory Fair Trading Acts or legalisation of another Government ("the relevant acts") in certain circumstances imply mandatory conditions and warranties which cannot be excluded. This warranty is in addition to and not in replacement for such conditions and warranties.

To the extent permitted by the Relevant Acts, in relation to your product and any other materials provided with the product ("the Goods") the liability of NetComm under the Relevant Acts is limited at the option of NetComm to:

- *Replacement of the Goods; or*
- *Repair of the Goods; or*
- *Payment of the cost of replacing the Goods; or*
- *Payment of the cost of having the Goods repaired.*

All NetComm ACN 002 490 486 products have a standard 12 months warranty from date of purchase. However some products have an extended warranty option (refer to packaging). To be eligible for the extended warranty you must supply the requested warranty information to NetComm within 30 days of the original purchase by registering on-line via the NetComm web site at

**[www.netcomm.com.au](http://www.netcomm.com.au)**

## Contact Information

If you have any technical difficulties with your product, please do not hesitate to contact NetComm's Customer Support Department.

Email: [support@netcomm.com.au](mailto:support@netcomm.com.au)

[www.netcomm.com.au](http://www.netcomm.com.au)

Note: NetComm Technical Support for this product only covers the basic installation and features outlined in the Quick Start Guide. For further information regarding the advanced features of this product, please refer to the configuring sections in this User Guide or contact a Network Specialist.

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